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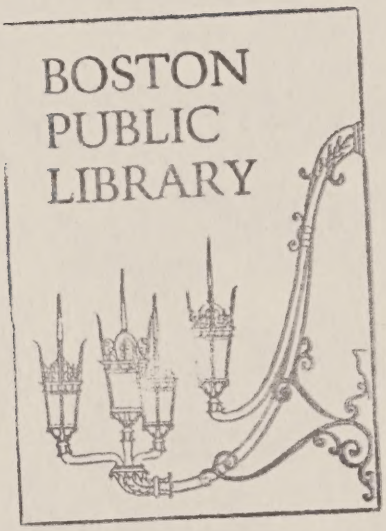
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PROFILE OF THE BOSTON METRO AREA

Prepared for

The Urban Land Institute
Washington, D.C.

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Research Department

September 1984

RAYMOND L. FLYNN, MAYOR
CITY OF BOSTON

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BOSTON - AN HISTORICAL PERSPECTIVE

The spirit of Boston's heritage is very much in evidence today. The past and present throughout the city echoes of change and development. Its history recalls the founding colonists of the Massachusetts Bay Company led by John Winthrop in 1630, the Boston Tea Party, Bunker Hill and the not so distant battle in Lexington and Concord. Its growing skyline symbolizes the city's transformation from a center of mercantile trade to a modern city with a diversified economic base.

From the 1600s to the mid-1800s, English Puritans and their descendants made up almost the entire population of Boston. As immigrants from other countries sailed to Boston shores, Boston's old English families became a small part of the city's population. In 1804, immigrants primarily from Ireland were among the first to populate. By the late 1800s, others migrated to Boston from Italy and other Eastern Europe countries.

Boston's downtown, the oldest section of the Boston Bay lies in the heart of a city with the oldest public park in the United States--the Boston Common. The Public Garden, next to the Common, lies on a land fill that was once a saltwater marsh. The new Lafayette Place in the center of the retail commercial district, complements Filene's, Jordan Marsh and other major downtown department stores. An active financial district of tall ornate office buildings combine the old architectural facades with mirrors and metal, symbolic of Boston's periods of growth.

Beacon Hill, rising north of the Boston Common, endures its 1800s' elegant mansions reminiscent of the beacon stations signalling ships in the harbor. The Waterfront, once servicing ships from all parts of the world, now spreads miles with docks for ship repair, coastal ships, fishing boats, scenic office views and the port of the Boston Marine Industrial Park.

In the center of the market district, Faneuil Hall bustles with the same energy and activity as in the 1700s. Everything from beans to caviar, food and dress, the different and not so different attracts more than two million visitors and residents annually.

The Back Bay district, west of the Public Garden, became a favorite residential district for Boston's wealthy families. From the new Copley Place complete with two major hotels, Nieman-Marcus and other distinguished fashion stores to the adjacent Newbury St. boutiques and galleries, many museums, churches and schools, Boston has created an extention of historical preservation and commercial development.

The North End had been the first home for thousands of immigrants. Its waterfront was a thriving, vibrant area serving Boston's shipping center. The Irish immigrated in large numbers supplying Boston with a needed, semi-skilled labor force. The prosperous warehouses and mercantile establishments attracted Eastern European Jews who supplied additional needed labor. The Italians arrived in large numbers in the 1890s and since then the North End has been overwhelmingly Italian.

South Boston, once part of Dorchester, was annexed to Boston in 1804. It remained basically undeveloped until the early 19th century, when real estate speculators purchased land in the area. In the 1930s, new bridges were opened and the northern marshland began to be filled for industrial development. As more land was created and industrial development expanded, South Boston increasingly became the home of industrial workers and their families. The Irish of the North End began relocating south of the city.

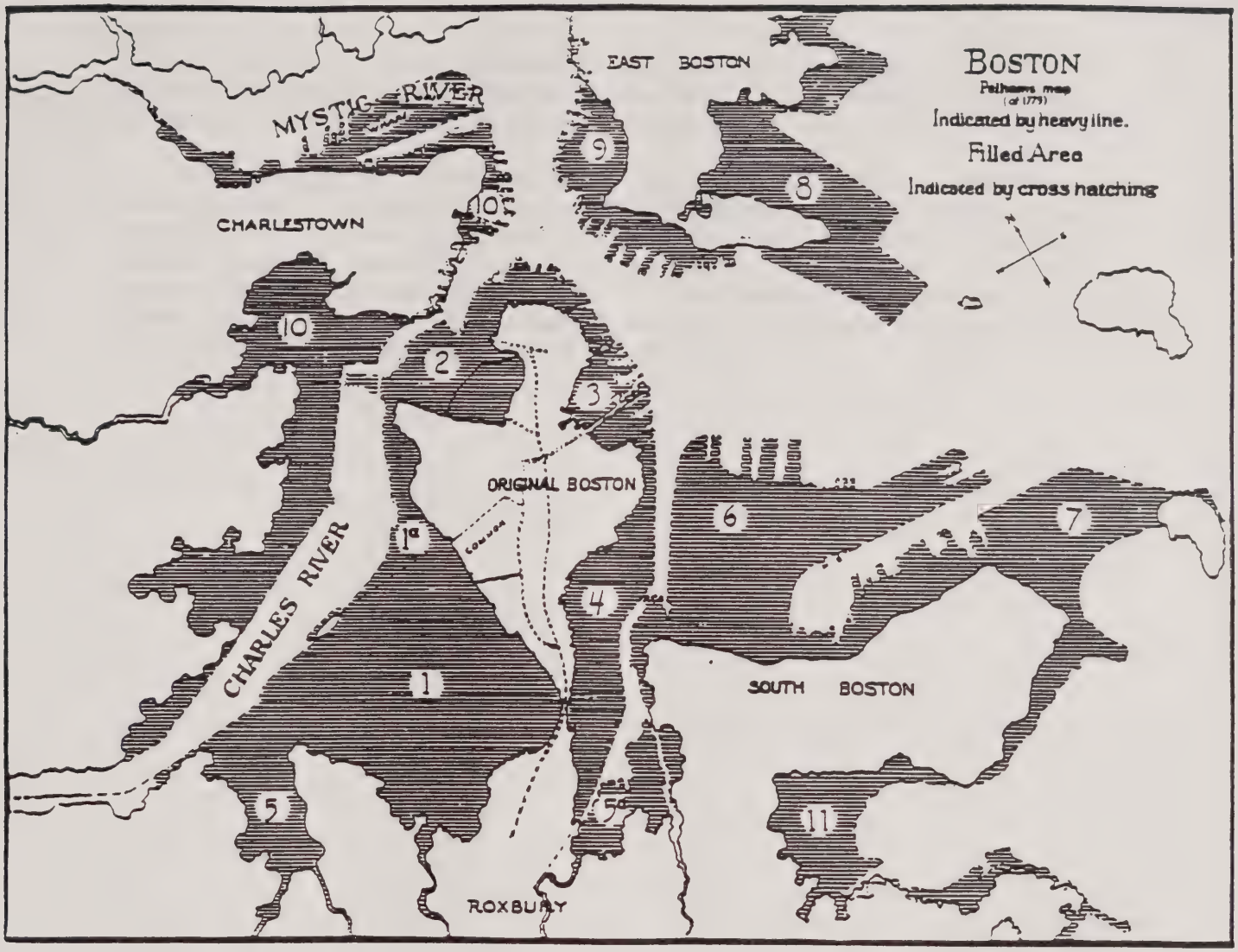
For nearly 200 years, Dorchester, annexed to Boston in 1870, developed primarily as a farming area and waterfront for Boston's commercial business. Roxbury lay at the edge of the hilly farmland connecting to Boston by a narrow neck stretching between the Back Bay and South Cove. These areas experienced ongoing change. The Great Boston Fire in 1874 brought more immigrant laborers to the already crowded western section, and Back Bay was established as Boston's fashionable residential district. The extention of one of the nation's first streetcar services to southern and eastern shores in 1890 led to the completion of the communities' residential development. At the end of the century, Lithuanians and Poles joined Italians who began to settle in the area. While Roxbury highlands remained primarily an affluent residential district during the 19th century, lower (northern) Roxbury became the site for light industrial uses and residential district for the lower-middle income population, expanding into Roxbury. Jewish families moved into the southern area replacing earlier residents who were predominantly Irish. At about the same time, black families moved into the northern area.

Development of both Bay Village and South Cove began in about the 1830s and continued over the years. While Bay Village maintained most of its character, South Cove, on the other hand, declined as a residential neighborhood, the victim of an expanding railroad network (South Station) that diminished the attractiveness of the area. The original residents began departing the Cove in the 1840s. The property was opened to successive waves of immigrants--Irish, Italian, Jewish, Syrian and, finally, Chinese. Land values declined as the area became a low rent district. The affordable rents attracted leather and garment industries which began to develop in the area.

The construction of canals, railways, and roads, together with landfill and waterfront development, resulted in Boston's rise as a mercantile and manufacturing center complete with a great seaport and a comprehensive transportation network. Boston completed Logan International Airport in 1947. In the 1940s and 1950s, the city and state cooperated in building a new system of highways and expressways in and around Boston. During this period, the concentration was on transportation development and few other improvements were made. Many older sections of the city began to deteriorate. Business began to decline, and taxes rose. Thousands of families moved from the city to the suburbs. Boston's population dropped from 801,444 in 1950 to 697,197 in 1960.

By the 1960s, the density of the metropolis promoted industries to expand outside of the City of Boston to Cambridge, Waltham, and other

FIGURE 1



THE FILLED-IN AREAS OF BOSTON

locations along major highways. As the suburbs developed, the built-up metropolis expanded as far west as Framingham and as far north as Lowell.

The City of Boston emerged in the 1980s as a regional center for information, knowledge, communications and a wide range of business, financial, health, educational and professional services.

The changes and development of the city has been absorbed in a new mixed economy. Significant downtown development has influenced the future of this growing metropolis, where 4.4 million square feet of office space is presently under construction, where industry is taking advantage of prime waterfront property and vacant land, where unemployment is below the national average, and where heritage and tradition attracts change--ahead of its time.

PHYSICAL FEATURES

The Boston Metropolitan Area's 92 cities and towns cover more than 1,000 square miles in eastern Massachusetts. Eighteen of these municipalities touch the Massachusetts coastline that features rocky and sandy stretches and deepwater ports at Boston and Salem. The City of Boston is located in the Boston Basin, the escarpment of which goes through Lynn and Saugus to the northeast and Malden, Medford, Arlington and Waltham to the west. Glacial activity in the Boston area created numerous drumlins--smooth-sloped hills--such as Breeds and Bunker Hills in Charlestown. The City of Boston is touched by three rivers: The Charles (bordering Cambridge and Watertown), the Mystic (bordering Chelsea and Everett) and the Neponset (bordering Quincy and Milton). The Concord River flows into eight of the suburban towns. Another distinctive feature is the Blue Hills (in Quincy and Randolph).

FIGURE 3

BOSTON METROPOLITAN AREA

Boston

Inner Suburbs

Outer Suburbs

POPULATION AND HOUSING

Population

The Boston Metropolitan Area accounts for nearly one-half of Massachusetts' population. The metro area's 1980 population, 2,763,357, represented a five percent loss in the 1970s after an eight percent gain in the 1960s (see Table 1). The City of Boston had 562,994 residents in 1980 or twelve percent fewer than in 1970. The inner suburbs (see Figure 3) had about the same number of residents in 1980 as in 1960. In contrast, the outer suburbs grew 39 percent (+224,859) between 1960 and 1980. The population shift from the central city and the inner suburbs to the outer suburbs coincided with growth in employment in the less densely settled, outer suburban towns.

Apparently, the Boston area's population is stabilizing in the 1980s. According to the U.S. Bureau of the Census, from April 1, 1980 to July 1, 1982, the City of Boston's population diminished by only 0.4 percent (or a rate of -0.2 percent per year compared to -1.2 percent per year in the 1970s). No comparable estimate is available yet for the metropolitan area.

The age distribution of the Boston Metropolitan Area's residents has changed markedly over the last two decades (see Table 2). As the "baby boom" generation has aged, the number of children has dropped, especially in the City of Boston, and the proportion of young adults has increased. In fact, one-third of the city's population was 20-34 years of age in 1980 compared to 21 percent in 1960. The proportion of young adults in the suburbs increased from 18 percent in 1960 to 26 percent in 1980. Over the same period, the proportion of elderly (65 years and over) increased from 10 percent to 12 percent in the suburbs and remained stable in the city at around 12 percent.

Neighborhoods

Boston is comprised of sixteen planning districts or "neighborhoods". See Table 2B and Figure 4.

Households

Despite the regional decline in population, the number of households increased by 10 percent in the metro area from 1970 to 1980 (see Table 3). The City of Boston, itself, had slightly more households than a decade earlier. The City fared relatively well among several of the nation's largest cities (see Table 4). The household size in the Boston metro area decreased from 3.2 to 2.73 as the number of young adults (in the prime household formation years) increased and the elderly (many of whom sought independent living situations) increased. Social preferences for nonfamily and single-person households also tended to shrink the size and expand the number of households. The average household size was even smaller in Boston: 2.40 in 1980.

Table 1

TOTAL POPULATION FOR 20 LARGEST CITIES
(In 1982 Population Rank Order)

Rank		1950	1960	1970	1980	1982	1950-60	1960-70	1970-80	1980-82
1.	New York	7,891,957	7,781,984	7,895,563	7,071,639	7,086,096	- 1	2	-10	+ .2
2.	Los Angeles	1,970,358	2,479,015	2,811,801	2,966,850	3,022,247	26	13	6	+ 1.8
3.	Chicago	3,620,962	3,550,404	3,369,357	3,005,072	2,997,155	-2	- 5	-11	- .2
4.	Houston	596,163	938,219	1,233,535	1,595,138	1,725,617	57	32	20	+ 8.2
5.	Philadelphia	2,071,695	2,002,512	1,949,996	1,688,210	1,665,382	- 3	- 3	-13	- 1.4
6.	Detroit	1,849,568	1,670,144	1,514,063	1,203,339	1,138,717	-10	- 9	-21	- 5.3
7.	Dallas	434,462	679,684	844,401	904,078	943,848	56	24	7	+ 4.3
8.	San Diego	334,387	573,224	697,471	875,538	915,956	71	22	26	+ 4.6
9.	Phoenix	106,818	439,170	584,303	789,704	824,230	311	33	35	+ 4.3
10.	San Antonio	408,442	587,718	654,153	785,880	819,021	44	11	20	+ 4.2
11.	Baltimore	949,708	939,024	905,787	786,775	774,113	- 1	- 4	-13	- 1.6
12.	Indianapolis	427,173	478,258	736,856	700,807	707,655	12	55	- 5	+ 1.0
13.	San Francisco	775,357	740,316	715,674	678,974	691,637	- 5	- 3	- 5	+ 1.9
14.	San Jose	95,280	204,196	459,913	629,442	659,181	114	125	37	+ 4.8
15.	Memphis	396,000	497,524	623,988	646,356	645,760	26	25	4	- .1
16.	Washington, D.C.	802,178	763,956	756,668	638,333	633,425	- 5	- 1	-16	- .8
17.	Milwaukee	637,392	741,324	717,372	636,212	631,509	16	- 3	-11	- .8
18.	Columbus	375,901	471,316	540,025	564,871	570,588	25	15	5	+ 1.0
19.	New Orleans	570,445	627,525	583,471	557,515	564,561	10	- 5	- 6	+ 1.2
20.	Boston	801,444	697,197	641,071	562,994	560,847	-13	- 8	-12	- .4

Source: U.S. Bureau of the Census.

TABLE 2

AGE DISTRIBUTION, 1960-1980

Selected Age Groups	Boston SMSA	Suburbs[a]	City of Boston
Total population, 1960	2,589,301	1,892,104	697,197
Percent of population 20 to 34 years	18.7	18.0	20.6
65 years and over	10.9	10.4	12.3
Total population, 1970	2,899,101	2,258,030	641,071
Percent of population 20 to 34 years	20.8	19.7	24.4
65 years and over	11.0	10.5	12.8
Total population, 1980	2,763,357	2,200,363	562,994
Percent of population 20 to 34 years	27.4	25.8	33.5
65 years and over	12.5	12.4	12.7

Source: U.S. Bureau of the Census (1961; 1982b), United Community Planning Corp

[a] Derived by subtracting the City of Boston from the Boston SMSA

FIGURE 1

Source: Doolittle, et. al., Future Boston.

TABLE 2B

BOSTON POPULATION, 1980 AND 1970
BY PLANNING DISTRICT

	1980	1970	Change	
			Number	Percentage
East Boston	32,178	38,873	-6,695	- 17.2
Charlestown	13,364	15,353	-1,989	- 13.0
South Boston	30,396	38,488	-8,092	- 21.0
Central	21,797	19,334	2,463	12.7
Back Bay-Beacon Hill	30,212	27,538	2,674	9.7
South End	27,125	22,680	4,445	19.6
Fenway-Kenmore	30,842	32,965	-2,123	- 6.4
Allston-Brighton	65,264	63,657	1,607	2.5
Jamaica Plain	39,331	47,767	-8,436	- 17.7
Roxbury	57,751	71,095	-13,344	- 18.8
North Dorchester	23,789	32,665	-8,876	- 27.2
South Dorchester	59,123	74,415	-15,292	- 20.5
Mattapan	35,827	45,449	-9,622	- 21.2
Roslindale	32,626	39,558	-6,932	- 17.5
West Roxbury	31,333	34,989	-3,656	- 10.4
Hyde Park	30,223	34,977	-4,754	- 13.6
Planning District Totals	561,181	639,803	-78,622	- 12.3
Harbor Islands and Crews of Vessels	1,748	1,268	480	37.9
Boston Total*	562,994	641,071	-78,077	- 12.2

* Planning districts may not sum exactly to City total.

Source: 1980 Census of Population and Housing: Summary Tape File 1; 1970 Census of Population and Housing: First Count Summary Tape. Prepared by S. Jaster, Boston Redevelopment Authority Research Department.

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TABLE 5

NUMBER OF HOUSEHOLDS BY HOUSEHOLD TYPE IN THE GREATER BOSTON AREA, 1970 - 1980

USEHOLD TYPE	GREATER BOSTON AREA			BOSTON			INNER SUBURBS			OUTER SUBURBS		
	1970	% CHANGE '70-'80	1980	1970	% CHANGE '70-'80	1980	1970	% CHANGE '70-'80	1980	1970	% CHANGE '70-'80	1980
USEHOLDS	897,622	+10%	990,660	217,618	—	218,457	469,836	+ 9%	511,459	210,168	+24%	260,744
Married-Couple Families	575,210	- 9%	525,596	102,147	-28%	73,333	312,705	+11%	277,006	160,358	+ 9%	175,257
Female-Headed Families	90,761	+28%	116,062	31,913	+11%	35,408	44,998	+27%	57,081	13,850	+70%	23,573
Male-Headed Families	22,810	+20%	27,370	6,903	+11%	7,633	12,155	+13%	13,710	3,749	+61%	6,027
NFAMILY HOUSEHOLDS	208,841	+54%	321,632	76,652	+33%	102,083	99,978	+64%	163,662	32,211	+74%	55,887

Outer Suburb towns of Boxborough, Hanson, Kingston, and Wrentham are not included for 1970. Information for these towns was not available.

rce: U.S. Census of the Popluation and Housing, 1970 - 1980, United Community Planning Corporation.

TABLE 4

CHANGE IN POPULATION AND HOUSEHOLDS IN 16 SELECTED CITIES, 1970-1980

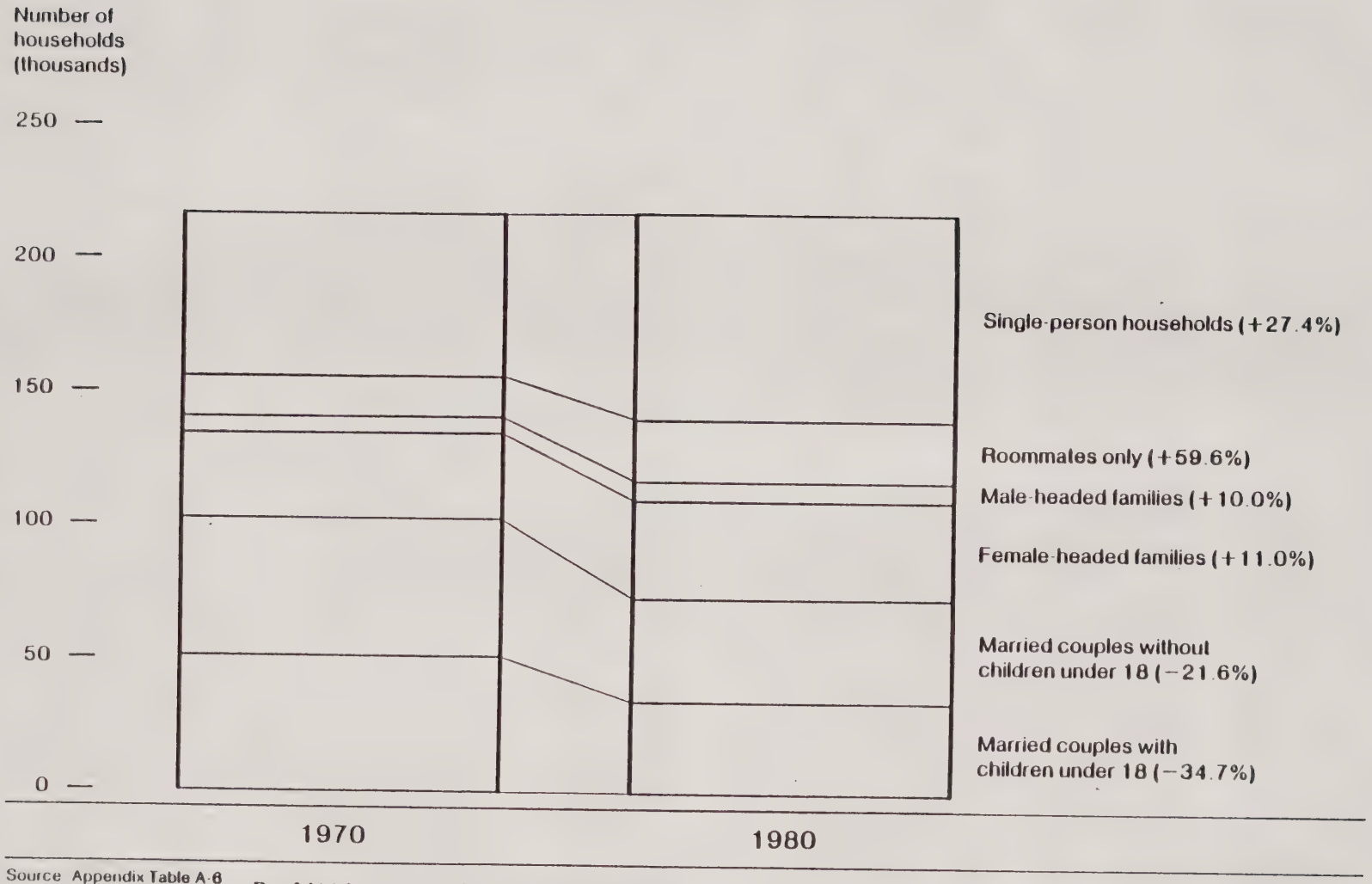
City	Population		Households		Household size[a]	
	1980	% Change 1970-80	1980	% Change 1970-80	1980	% Change 1970-80
Atlanta	425,022	-14.1%	162,556	+0.1%	2.61	-14.6%
Baltimore	786,775	-13.1	281,414	-2.7	2.80	-10.7
Boston	562,994	-12.2	218,457	+0.4	2.60	-12.5
Chicago	3,005,072	-10.8	1,093,319	-3.9	2.75	-7.1
Denver	491,396	-4.5	211,566	+14.2	2.32	-16.4
Detroit	1,203,339	-20.5	433,488	-12.9	2.78	-8.6
Los Angeles	2,966,763	+5.5	1,135,230	+10.5	2.61	-4.7
New Orleans	557,482	-6.1	206,435	+7.9	2.70	-12.9
New York	7,071,030	-10.4	2,788,530	-1.7	2.54	-8.9
Philadelphia	1,688,210	-13.4	619,781	-3.5	2.72	-10.2
Phoenix	764,911	+30.9	284,780	+53.0	2.69	-14.1
Pittsburgh	423,938	-18.5	166,067	-6.7	2.55	-12.6
St. Louis	453,085	-27.2	178,048	-17.4	2.54	-11.9
San Francisco	678,974	-5.1	298,956	+1.3	2.27	-6.3
Seattle	493,846	-7.0	219,469	+6.5	2.25	-12.6
Washington, D.C.	637,651	-15.7	252,952	-3.7	2.52	-12.5

Source: Population data from 1980 Census of Population, Advance Reports, PHC80-V, state volumes; household data from tabulations of STF-1 data tapes provided by various state agencies; Doolittle, et. al., Future Boston

a. Number is calculated by dividing total population by total occupied housing units. Since persons living in group quarters are included in the numerator, the ratio slightly overstates true household size. For the City of Boston, mean household size is 2.4 persons when excluding those living in dormitories, prisons, and hospitals.

FIGURE 5

CHANGES IN HOUSEHOLD COMPOSITION IN THE CITY OF BOSTON, 1970-1980



Source Appendix Table A-6 Doolittle, et. al., Future Boston.

Income

Since 1959, the Boston Metropolitan Area has maintained a higher median family income than the nation, the state and the City of Boston (see Table 5). The national median grew somewhat faster in the 1970s, largely due to economic expansion in the Southwest. Median family income in the City of Boston has grown, but at a slower pace than the metro area and the state.

Per capita income was two thousand dollars higher in the metro area than in the City of Boston (see Table 6). However, both the City and the suburbs have had greater growth in per capita income than the nation since 1975. In 1982, the City was on a par with the nation and the metro area's per capita exceeded that of the nation by 18 percent.

Poverty in the metro area in 1979 was most prevalent among black and hispanic families in the City of Boston (see Table 7). The incidence of poverty was greatest for the "female householder, no husband present, with related children under 18 years", whether white (52 percent), black (50 percent) or hispanic (72 percent). Over the last four decades, the proportion of production workers (crafts and operatives) has declined. While the share of professional, technicians and managers has increased from one of five to one of three workers.

Labor Force

The change in size of selected labor force age groups in the Boston metropolitan area, 1950-2000, indicates that the labor force will be quite experienced. The population aged 35 to 44 will experience the greatest relative growth, while the entry-level labor force and college-age population will decline (see Table 8).

In terms of current occupations, residents of the City of Boston in 1980 worked primarily in professional, technical and managerial positions (30 percent), clerical and sales (30 percent), and service including household (18 percent). See Table 10. Residents of the metro area had a similar occupational profile, with somewhat less service workers (14 percent) and slightly more professional, technical and managerial workers (33 percent; see Table 9).

Housing

The Boston Metropolitan Area accounted for one-half of the state's housing units in 1980. In the City of Boston, 73 percent of the occupied housing units were renter-occupied (see Table 11). Home ownership was more common in the suburbs where six of every ten housing units was owner-occupied. The Census Bureau found low vacancy rates among homeowner units (0.9 percent) in the metro area and rental units in the suburbs (3.4 percent). The higher vacancy rate for City of Boston rentals (7.5 percent) reflects a large number of boarded-up public housing units rather than a large number of available units.

TABLE 5

MEDIAN FAMILY INCOME IN 1959, 1969, and 1979
UNITED STATES, MASSACHUSETTS, BOSTON SMSA, BOSTON CITY
Universe: Families

GEOGRAPHIC AREA	1959	1969	% CHANGE 1959-1969	1979	% CHANGE 1969-1979
UNITED STATES	$5,660	$9,586	+69.4%	$19,928	+107.9%
MASSACHUSETTS	$6,272	$10,835	+72.8%	$21,165	+95.3%
BOSTON SMSA	$6,687	$11,449	+71.2%	$22,847	+99.6%
BOSTON CITY	$5,747	$9,133	+58.9%	$16,062	+75.9%

SOURCE: 1960, 1970, 1980 U.S. Census of the Population and Housing,

United Community Planning Corporation

Table 6

COMPARISON OF PER CAPITA INCOME IN BOSTON (SUFFOLK COUNTY), THE METRO AREA, AND THE UNITED STATES
SELECTED YEARS, IN CURRENT DOLLARS

Year	Per Capita Income			Ratio		
	Boston	Metro Area	U.S.A	City/Metro Area	Metro Area/USA	City/USA
1929	1,407	996	705	1.41	1,41	2.00
1940	1,164	824	592	1.41	1.39	1.97
1950	1,827	1,656	1,496	1.10	1.10	1.22
1959	2,198	2,473	2,145	.89	1.15	1.02
1967	3,298	3,586	3,142	.92	1.14	1.05
1975	5,472	6,365	5,861	.86	1.09	.93
1979	8,196	9,378	8,757	.87	1.07	.94
1980	9,353	10,846	9,511	.86	1.14	.98
1982	11,072	13,087	11,100	.79	1.18	1.00

Source: Regional Economics Information System, Bureau of Economic Analysis.

TABLE 7

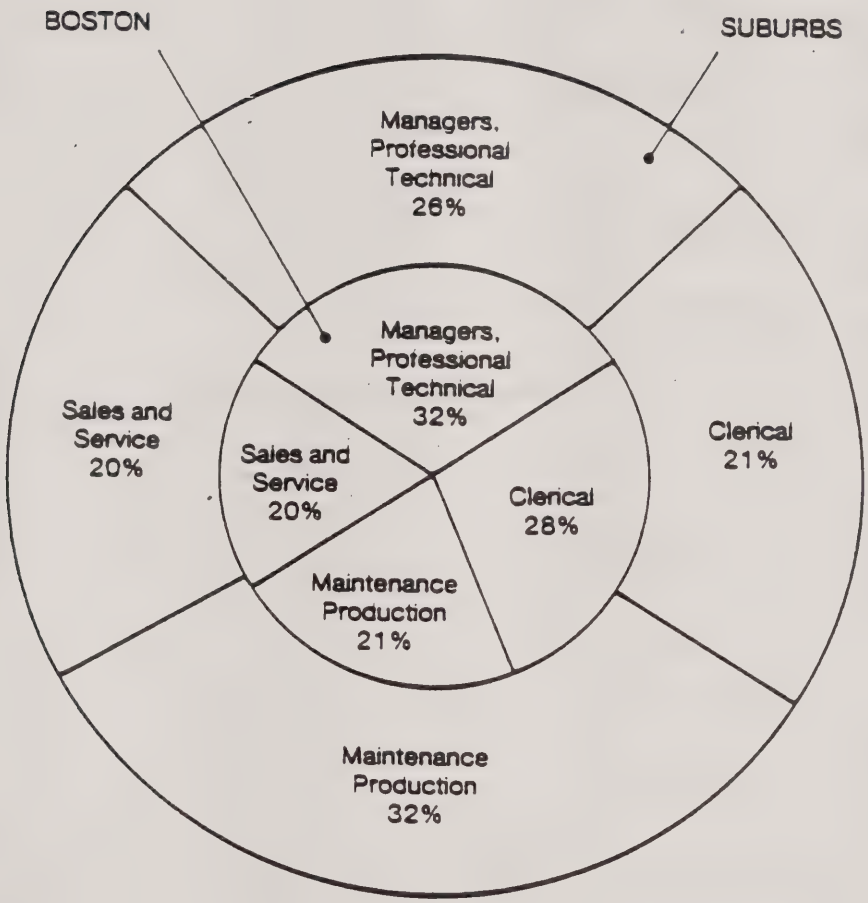
POVERTY STATUS OF FAMILIES IN 1979

Family or Householder	Boston SMSA	City of Boston
	Number of Families or Households with Incomes Below Poverty Level	
Families	48,805	19,680
% below poverty level	7.3	16.7
With related children under 18 years	37,926	15,975
% below poverty level	11.3	26.8
Female householder, no husband present	28,074	12,985
With related children under 18 years	25,378	11,806
% below poverty level	40.2	52.8
Householder 65 years and over	5,050	1,476
% below poverty level	4.6	7.4

Source: U.S. Bureau of the Census (1983b), United Community Planning Corporat

FIGURE 5

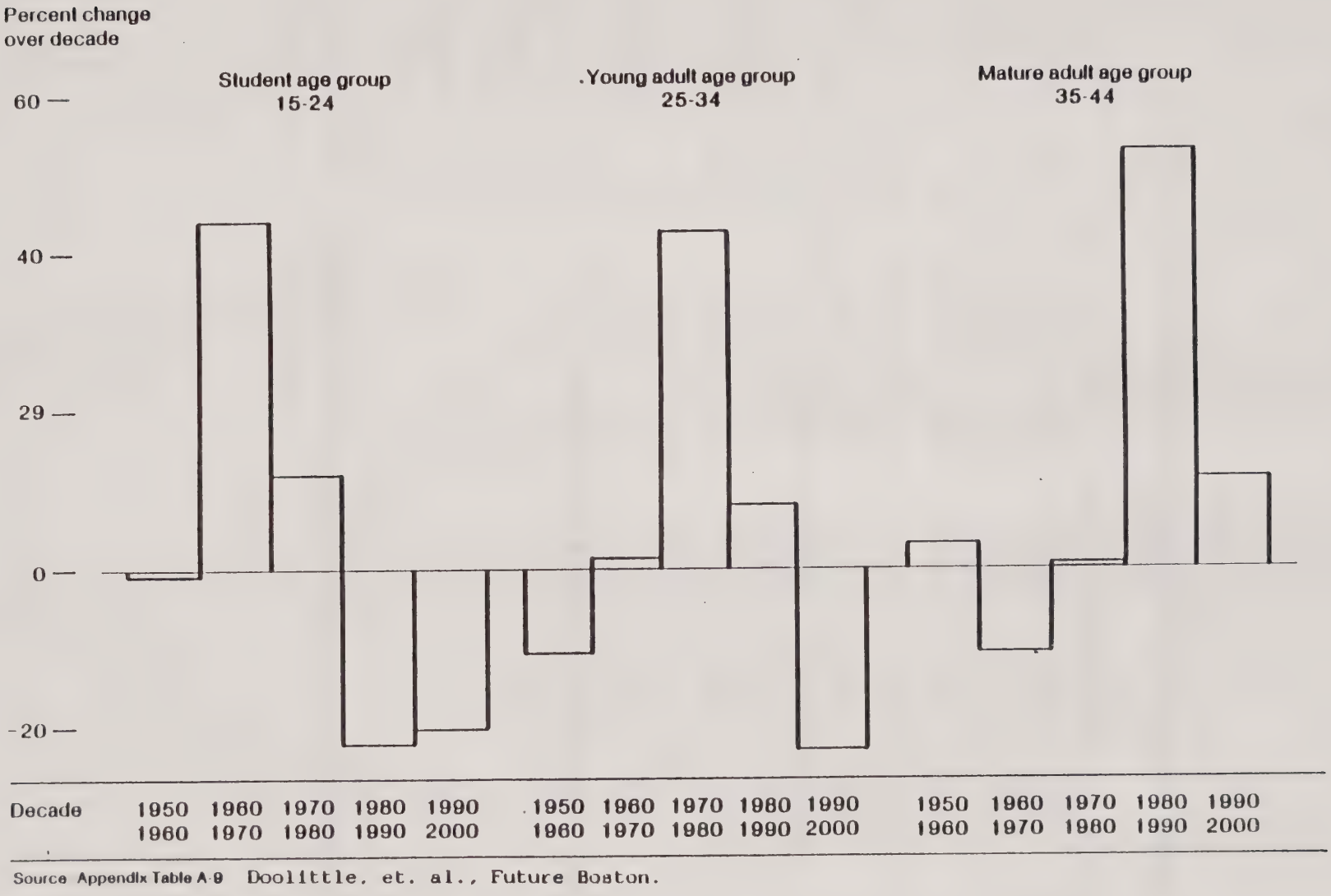
ESTIMATED OCCUPATIONAL SHARES OF PUBLIC AND PRIVATE SECTOR JOBS, 1980



Source: Table 8 Doolittle, et. al., Future Boston.

FIGURE 7

CHANGE IN SIZE OF SELECTED LABOR FORCE AGE GROUPS IN THE BOSTON METROPOLITAN AREA, 1950-2000



Source Appendix Table A-9 Doolittle, et. al., Future Boston.

TABLE 8

CHANGES IN SIZE OF SELECTED LABOR FORCE AGE GROUPS IN THE BOSTON METROPOLITAN AREA, 1950-2000

Year	Population in age group							
	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75+
1950	323,015	344,840	364,635	322,665	299,555	239,435	154,375	77,460
1960	455,787	342,247	324,687	343,717	312,114	261,801	182,822	94,395
1970	515,126	492,845	329,540	305,459	319,819	264,660	186,846	123,523
1980	377,214	552,168	469,729	306,375	291,081	277,077	197,683	147,061
1990	316,001	413,484	538,835	444,939	263,723	245,486	215,441	159,472
2000	321,007	328,050	412,962	481,563	402,105	233,187	193,939	178,991
	Change in population in age group over decade							
1950-1960	132,772	-2,593	39,948	11,052	12,559	22,366	28,447	16,935
1960-1970	59,339	150,598	4,853	-38,258	7,705	2,859	4,024	29,128
1970-1980	-137,912	59,323	140,189	916	-28,738	12,417	10,837	23,538
1980-1990	-78,949	-122,892	42,070	154,683	-16,673	-34,167	8,394	30,974
1990-2000	5,006	-85,434	-125,873	36,624	138,382	-12,299	-21,502	19,519
	Percent change in population in age group over decade							
1950-1960	+41.1%	-0.8%	-11.0%	+3.3%	+12.2%	+9.3%	+18.4%	+21.0%
1960-1970	+13.0	+44.0	+1.5	-11.1	+2.5	+1.1	+2.2	+30.9
1970-1980	-26.8	+12.0	+42.5	+0.3	-9.0	+4.7	+5.8	+19.0
1980-1990	-20.0	-22.9	+8.5	+53.3	-5.9	-12.2	+4.1	+15.1
1990-2000	+16.0	-20.7	-23.4	+8.2	+52.5	-5.0	-1.0	+12.2

Source: 1950, 1960, 1970 Census of Population, Detailed Characteristics; tabulations of 1980 Census Summary Tape File 1 provided by Massachusetts State Data Center. Projections done by Joint Center for Urban Studies.

Doolittle, et. al., Future Boston.

TABLE 9

POPULATION AND LABOR FORCE CHARACTERISTICS 1930-1980
BOSTON METRO AREA (SMSA)

	1930	1940	1950	1960	1970	1980
Population (thousands)	NA	2,350	2,370	2,589	2,574	2,763
% Non-White	NA	1.6	2.4	3.4	5.5	8.8
% Less than 20 yrs. old	NA	30.3	30.0	35.2	35.7	28.5
% 20-64 yrs. old	NA	61.3	60.3	53.9	53.1	59.0
% Greater than 65 yrs. old	NA	8.4	9.7	10.9	11.3	12.5
% Foreign born	NA	NA	NA	12.4	9.9	10.4
Median age	NA	NA	32.8	32.0	29.1	31.3
Households (thousands)	NA	651*	647	770	860	991
Persons per household	NA	3.40*	3.46	3.23	3.09	2.69
Civilian Labor Force**						
Male participation (%)	NA	77.1	76.1	76.4	77.7	74.1
Female participation (%)	NA	31.0	32.4	38.1	45.3	53.0
Occupations of Employed(%)						
Professional, Technical, Managerial	NA	20.0	22.1	24.7	29.0	32.9
Clerical & Sales	NA	25.7	26.8	28.6	30.6	30.4
Crafts	NA	13.8	15.0	14.1	11.6	9.8
Operatives	NA	20.6	19.5	17.7	12.8	9.7
Service, including Household	NA	14.3	11.4	11.1	12.6	13.7
Laborers, including Farm	NA	5.8	5.1	3.8	3.4	3.5

* Housing units and persons per housing unit.

** 14 or more years of age (1930-1960); 16 or more years of age (1970-1980).

NA (not available).

Source: U.S. Bureau of the Census, 1930-1980.

TABLE 10

POPULATION AND LABOR FORCE CHARACTERISTICS 1930-1980
BOSTON CITY

	1930	1940	1950	1960	1970	198
Population	781,188	770,816	801,444	697,197	641,071	562,
% Non-White	2.6	3.1	5.3	9.8	18.2	3
% Less than 20 yrs old	33.2	29.8	28.9	32.1	33.3	2
% 20-64 years old	61.3	62.2	61.4	55.7	53.9	6
% Greater than 65 yrs old	5.5	8.0	9.7	12.3	12.8	1
% Foreign born	NA	NA	NA	15.8	13.1	
Median age	NA	NA	32.6	32.9	28.1	2
Households	NA	211,514*	219,398	224,432	217,622	218,
Persons per household	NA	3.36*	3.37	2.93	2.77	2
Civilian Labor Force**						
Male participation(%)	84.4	77.2	75.2	75.9	72.0	6
Female participation(%)	35.2	34.0	35.3	42.7	47.8	5
Occupations of Employed						
Professional, Technical, Managerial	NA	18.1	18.2	18.8	22.5	3
Clerical & Sales	NA	27.2	28.0	29.6	32.6	3
Crafts	NA	12.8	13.6	12.4	10.2	
Operatives	NA	18.8	19.8	20.0	13.8	
Service, including Household	NA	17.9	14.6	14.6	16.8	1
Laborers including Farm	NA	5.3	5.8	4.6	4.2	

* Housing units and persons per housing unit.

** Ages 14 and over in 1930-1960 and ages 16 and over in 1970-1980.

NA (not available).

Source: U.S. Bureau of the Census, 1930-1980.

TABLE 11

GENERAL HOUSING CHARACTERISTICS, 1980

Selected Characteristics	Massachusetts	Boston SMSA	Suburbs[a]	City of Boston
Total persons	5,737,037	2,763,357	2,200,363	562,994
Total year-round housing units	2,140,141	1,037,930	796,626	241,304
Occupied units	2,032,717	990,660	772,203	218,457
Owner-occupied	1,169,819	527,156	467,652	59,504
% owner-occupied	57.5	53.2	60.6	27.2
Renter-occupied	862,898	463,504	304,551	158,953
Vacancy rate				
Homeowner	1.0	0.9	0.7	1.8
Rental	5.1	4.8	3.4	7.5

Source: U.S. Bureau of the Census (1982a), United Community Planning Corporation

[a]Derived by subtracting the City of Boston from the Boston SMSA.

The housing supply increased in the suburbs and the City between 1970 and 1980 (see Table 12). Growth in the suburbs was substantial in the 70s and in the 1960s. In terms of units per structure, single-family, detached units comprise 54 percent of the housing stock in the suburbs, but only 12 percent of the stock in the City of Boston. The City of Boston has a large regional share of structures that have three or more units (see Table 13).

TABLE 12

CHANGES IN THE HOUSING SUPPLY, 1960-1980

Occupancy Status	Boston SMSA	Suburbs[a]	City of Boston
	Percentage change, 1960 - 1970[b]		
Total year-round housing units	11.3	17.0	-2.3
Occupied units	11.6	17.6	-3.1
Owner-occupied	12.2	15.0	-3.4
Renter-occupied	10.9	22.0	-3.1
Vacant[c]	5.0	-3.2	13.9
	Percentage change, 1970 - 1980[b]		
Total year-round housing units	16.5	21.0	3.8
Occupied units	15.2	20.3	0.4
Owner-occupied	16.6	19.1	0.5
Renter-occupied	13.7	22.2	0.4
Vacant[c]	37.7	44.3	31.6

Source: U.S. Bureau of the Census (1962; 1971; 1982a), United Community Plannin

[a]Derived by subtracting the City of Boston from the Boston SMSA
[b]See Appendix, Tables A, B, and C for the absolute numbers.
[c]For sale or rent

TABLE 13

STRUCTURAL CHARACTERISTICS OF HOUSING UNITS, 1980

Units in Structure	Boston SMSA	Suburbs[a]	City of Boston	Percent of Tota
Total year-round housing units	1,038,139	796,796	241,343	23.2
1, detached	455,942	426,980	28,962	6.4
1, attached	24,087	15,303	8,784	36.5
2	154,785	119,250	35,535	23.0
3 and 4	142,392	77,960	64,432	45.2
5 to 9	72,283	42,848	29,435	40.7
10 to 49	122,890	71,424	51,466	41.8
50 or more	63,535	41,063	22,472	35.4
Mobile home or trailer, etc.	2,225	1,968	257	11.5

Source: U.S. Bureau of the Census (1983a), United Community Planning Corporation

[a]Derived by subtracting the City of Boston from the Boston SMSA.

THE REGIONAL ECONOMY

As of mid-year 1984, the economic outlook for the Boston Metropolitan Area is bright. Key measures of the economic health of the New England region and the Boston area point to an outstanding year and good prospects for the rest of the decade. In particular, rising capital investment, expanding job openings, and relatively low unemployment rates indicate burgeoning economic strength.

The City of Boston is the regional economic center of New England. Boston and its metropolitan area spark economic activity in the region and respond to regional economic trends. Since 1976, the economies of the region and its major city and metropolitan area have performed exceptionally well as generators of jobs and income. Recovering smartly from the employment lag of the early 1970s, New England and the Boston area weathered the recessions of the early 1980s with relatively low unemployment rates and achieved better-than-average growth in employment and per capita personal income. Substantial structural change in the City and region in the last two decades, favoring business and professional services, higher education and medicine, finance and high-tech industry, set the stage for the economic expansion that has been most evident in the last eight years.

Employment and Income

The economy of the Boston metropolitan area, of which the City is the center, performed comparatively well during the national recession, and bloomed in 1983, although the metro area had virtually no job growth during the during the 1980-82 period (0.2 percent). During 1983, the Boston metropolitan area expanded its employment by 23,000 (or 1.6 percent). From 1976 through 1983, employment in the area grew by 231,000, or 2.4 percent (see Table 15).

The City of Boston recorded substantial growth in employment after the severe recessions of the early- and mid-1970s. From 1976 to 1983, the Boston economy expanded by 58,000 jobs or nearly twelve percent (see Table 16). Business and professional services, health and higher education, and finance and insurance led the growth, while manufacturing and wholesale trade declined. Preliminary data indicate that the City's employment grew by about two percent during 1983.

Boston's gain of 58,000 jobs, from 1976 to 1983, was centered principally in the broad range of services activities (40,000) and finance (15,000), supplemented by more modest gains in government (4,400), transportation and communication (3,000), construction (1,900) and retail trade (1,800). There were net losses in manufacturing (-6,000), and wholesale trade (-3,600). Employment in the City had expanded notably in the 1976-81 period, was set back modestly with the 1982 recession, and surged ahead in 1983. The growth in services activities throw light on the Boston phenomena. Medical and hospital service rose by 12,800, higher education by 10,000, and business services by 9,800. Increases occurred also in hotel service (2,500), and social nonprofit and cultural activities (4,200). Job growth in

TABLE 15

TRENDS IN NON-AGRICULTURAL WAGE AND SALARY EMPLOYMENT AND PERSONAL INCOME, 1976-1983

Percent Change

Non-Agricultural Wage and Salary Employment (in percent)

Year	City of Boston	Boston Metro Area	Massachusetts	New England	United States
1976-1983	11.6%	18.2%	12.5%	14.3%	13.6%
1980-1983	2.0%	1.8%	2.6%	2.4%	1.5%
1982-1983	2.0%	1.6%	.7%	1.6%	1.3%

Per Capita Personal Income (in percent)

Year	City of Boston **	Boston Metro Area	Massachusetts	New England	United States
1976-1983	96.2%	100.1%	95.4%	108.3%	83.4%
1976-1980	52.7%	52.9%	50.6%	62.0%	49.3%
1980-1982	19.3%	21.5%	20.5%	19.7%	16.8%
1982-1983	7.7%***	7.7%***	7.7%	7.4%	5.2%

* Boston Employment Series is total (BEA) rather than wage and salary employment (BLS).

** Per Capita Income for Boston is from Suffolk County.

*** Estimated.

Source: U.S. Department of Labor, Bureau of Labor Statistics and U.S. Department of Commerce, Bureau of Economic Analysis.

TABLE 16

CITY OF BOSTON EMPLOYMENT, 1976-1983

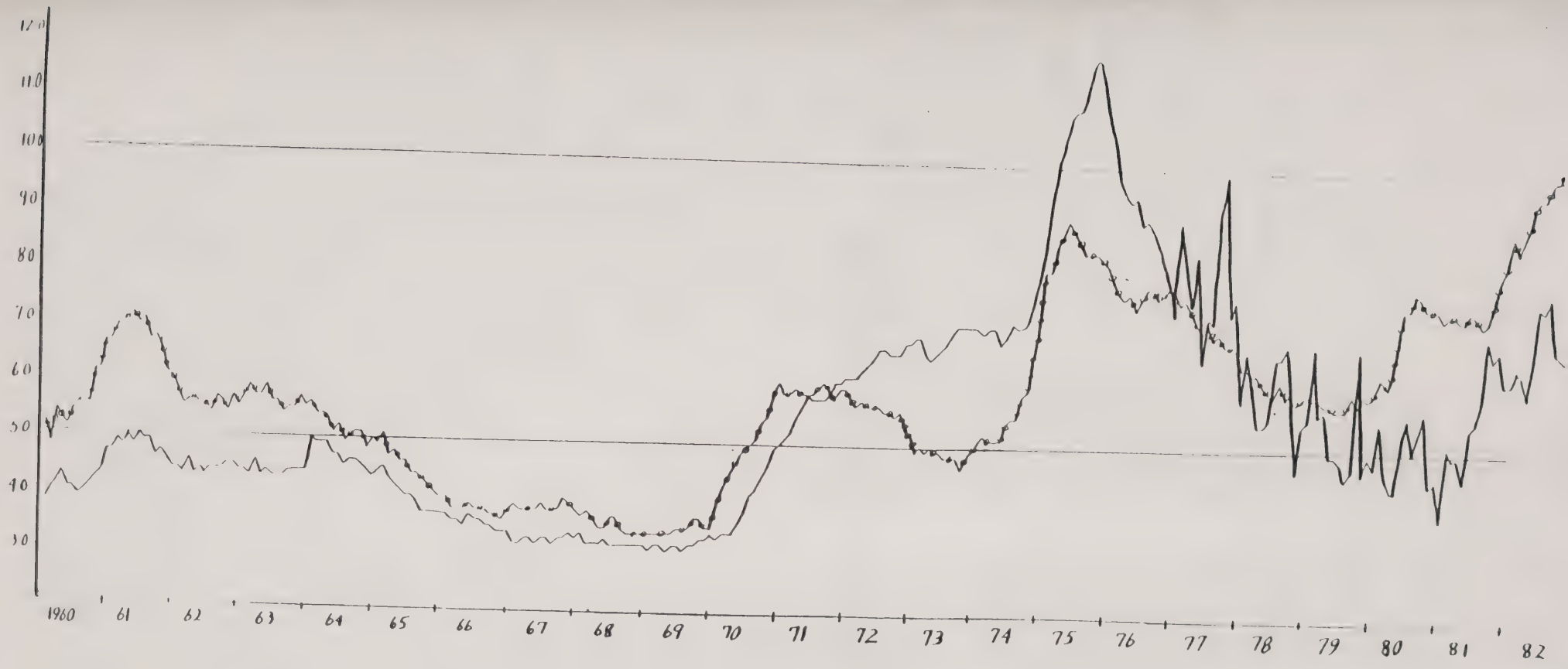
SELECTED YEARS AND CHANGE BY INDUSTRY

INDUSTRY	1976	1977	1980	1981	1982	1983	CHANGE 1976-1983 NUMBER	PERCENT
AGRI.MINING	791	617	563	499	547	566	- 225	-28.4
CONSTRUCTION	9,003	7,914	10,163	10,365	10,445	10,346	1,343	14.9
MANUFACTURING	53,385	53,763	51,861	50,811	49,685	46,989	- 6,396	-12.0
TRANSPORTATION-PU.	34,131	32,982	36,660	37,276	36,120	39,514	5,383	15.8
WHOLESALE TRADE	29,619	29,827	27,399	27,420	25,051	26,028	- 3,591	-12.1
RETAIL TRADE	55,008	54,849	55,628	55,670	55,197	56,522	1,514	2.8
FINANCE-INS-RE	62,229	63,366	70,451	74,436	76,584	76,245	14,016	22.5
SERVICES	160,902	161,988	187,991	190,249	193,602	199,017	38,115	23.7
HOTEL	4,144	4,698	6,495	6,018	6,389	6,568	2,424	58.5
MEDICAL	51,045	52,388	58,524	59,617	60,985	62,690	11,645	22.8
EDUCATIONAL	21,169	23,891	29,222	29,884	30,008	30,848	9,679	45.7
CULTURAL	4,834	4,786	4,800	4,777	4,840	4,975	141	2.9
SOCIAL-NONPROFIT	16,360	17,300	20,036	19,913	20,135	20,698	4,338	26.5
BUSINESS	27,373	28,789	33,808	33,722	34,461	35,425	8,052	29.4
OTHER	35,977	30,136	35,106	36,317	36,784	37,813	1,836	5.1
GOVERNMENT	85,048	85,882	96,017	94,683	89,142	91,717	6,669	7.8
PROPRIETORS	10,560	10,860	11,764	12,133	12,070	12,699	2,139	20.3
TOTAL ALL SECTORS	500,676	502,048	548,497	553,542	548,444	559,643	58,967	11.8

SOURCE: MASSACHUSETTS DIVISION OF EMPLOYMENT SECURITY, ES-202 SERIES;
U.S. DEPARTMENT OF COMMERCE, BUREAU OF ECONOMIC ANALYSIS, UNPUBLISHED SERIES;
BUREAU OF THE CENSUS, COUNTY BUSINESS PATTERNS, MASSACHUSETTS.

08.07.84 JPB

MONTHLY UNEMPLOYMENT RATES, BOSTON AND THE UNITED STATES



BOSTON METROPOLITAN AREA ————————

United States -•-•-•-•-•-•-

BRA Research
May 1983

TABLE 17

UNEMPLOYMENT RATES*

	1970	1975	1977	1980	1981	1982	1983	March 1983	March 1984
oston	4.9%	12.8%	9.5%	6.1%	7.0%	9.1%	7.9%	8.9%	6.6%
oston SMSA	4.0	10.5	7.8	5.0	5.7	6.7	5.8	6.6	4.8
assachusetts	4.6	11.2	8.1	5.6	6.3	7.9	6.9	8.0	5.3
ew England	4.9	10.3	7.6	5.9	6.3	7.8	6.8	8.4	5.9
nited States	4.9	8.5	7.0	7.1	7.6	9.7	9.6	10.8	7.8

* Not seasonally adjusted.

Sources: U.S. Bureau of Labor Statistics; Massachusetts Division of Employment Security (City Rate Only).

TABLE 13

UNEMPLOYMENT RATES
IN THE NATION'S LARGEST METROPOLITAN AREAS
(in percent)

Metropolitan Area	Annual Average 1981	Annual Average 1982	March 1983	March 1984
Sunbelt				
Atlanta	5.4	6.4	7.1	5.1
Dallas	4.6	5.7	5.8	3.9
El Paso	9.1	11.1	13.3	10.0
Houston	4.1	6.5	10.0	7.3
Jacksonville	5.9	7.0	8.2	5.3
Los Angeles	6.9	9.3	10.1	7.9
New Orleans	7.8	9.3	11.2	7.9
Phoenix	5.1	7.9	8.1	4.2
San Antonio	5.7	6.4	6.8	5.1
San Diego	6.9	9.3	9.8	6.7
San Jose	5.9	7.5	8.4	5.7
Industrial				
Buffalo	9.5	12.6	13.6	10.7
Chicago	8.2	10.6	11.4	9.6
Cincinnati	NA	10.5	11.9	NA
Cleveland	8.5	10.7	12.6	9.9
Detroit	13.0	15.9	17.1	NA
Indianapolis	8.3	9.4	10.9	NA
Milwaukee	7.4	10.5	12.7	7.3
Newark	7.2	8.7	8.5	6.9
Philadelphia	7.5	8.6	9.6	7.0
Pittsburgh	7.5	12.3	16.2	11.8
St. Louis	8.5	9.9	11.5	9.7
Broad-Based Services				
Baltimore	8.4	9.9	9.3	6.3
BOSTON	5.9	6.7	6.6	4.8
Columbus	7.7	8.9	9.5	8.1
Denver	4.8	6.6	6.4	4.3
Kansas City	6.7	8.1	9.9	6.5
Memphis	8.2	9.7	10.7	8.2
Minneapolis-St. Paul	4.4	6.4	8.1	5.1
Nashville	6.9	8.8	9.4	6.0
New York	8.3	8.9	10.1	7.8
San Francisco-Oakland	6.1	8.2	8.4	6.8
Seattle	7.8	10.3	11.0	8.7
Washington, D.C.	4.9	5.8	5.7	4.5
United States	7.6	9.7	10.8	7.8

Source: U.S. Department of Labor, Bureau of Labor Statistics, May 15, 1984. Monthly rates are not seasonally adjusted.

Finance responded to the expansion of banking, money management and insurance activities, with the rise in interest rates and the revival of the asset management markets. There was a net gain in government employment over the seven-year period, despite a curtailment of public employment since 1980 as a consequence of tax limitation legislation impacting cities and towns, and cutbacks in state government employment.

Employment Structure

Boston's relative improvement in economic performance reflected extensive structural change in the City and metropolitan economies. A transformed economic base, driven by knowledge, information and high technology industries, now generates most of the Boston area's employment and income. Between 1950 and 1983, Boston's services activities, including transportation, communication, public utilities, finance, insurance, and business and professional services expanded their share of the City's total employment from 32 percent to 56 percent, while the manufacturing and trade shares declined to 9 percent and 15 percent respectively.

Unemployment Rate

The structural transformation of the City and regional economies contributed to relative improvement in unemployment trends. Most notably, the positions of Boston and its metro area have reversed since 1977 in relation to that of the United States (see Table 17). In the national recession year of 1975, unemployment rates had soared to over 12 percent in the City and over 10 percent in the metropolitan area. After 1977, unemployment rates of Boston and the metro area were progressively less than the national rates. For the City, annual rate of unemployment dropped a full point below the national rate in 1980 and has remained well under the national average through March 1984, the latest date for which information was available at the time of the preparation of this report.

An analysis of short-term trends in unemployment rates and number of employees sheds light on changes in Boston and the metro area economy. During the 1960s, the Boston area's monthly unemployment rates were consistently below national rates (see Figure 8). The national contraction and restructuring of the first half of the 1970s hit the Boston area especially hard as employment in the older, non-durable goods manufacturers declined sharply. The Boston area's unemployment rate rose above the national rate in 1971 and continued to rise in 1975 after the national rate began to descend.

The Boston area recovered from the severe setback of 1970-75 to exceed the national growth rate in employment from 1976 to 1983. Monthly metro area unemployment rates dipped below national rates in 1976 and have stayed well under the nation's average since then. The difference between the metro area and national unemployment rates ranged from 2.7 to 4.5 percentage points during 1983 (not seasonally adjusted). In March 1984, the Boston area's rate was 4.8 percent or fifth lowest

among the 31 large metropolitan areas for which information was available (see Table 18).

Wages

Boston area workers made a strong advance in average annual pay from 1981 to 1982. The 8.6 percent increase for all workers ranked 24th among 314 metropolitan areas. However, the Boston Metropolitan Area had relatively low pay levels for selected occupational groups January-December, 1982. Where the average pay level for each industry and occupational group in 262 Standard Metropolitan Statistical Areas equalled 100, Boston pay levels were as follows: 95 for office clerical occupations, 97 for electronic data processing, 90 for skilled maintenance and 88 for unskilled plant occupations. Table 19 shows the relative levels and Boston's ranking among 70 metropolitan areas.

Cost-of-Living

The cost-of-living determines the "real" value of wages and other income in the Boston area. From January 1983 to January 1984, the consumer price index in the Boston area (for all urban consumers) rose 3.4 percent, compared to 4.1 percent for the nation. That was typical of trends since early 1982: The Boston area's inflation has been lower than the national rate in most months. In the most recent twelve months, the Boston area's cost-of-living showed modest increases in medical care (7.5 percent), housing (3.0 percent) and food (4.9 percent) that were nearly offset by decreases in energy (-2.6 percent) and clothing (-0.7 percent).

The low inflation rate benefited Boston area workers. In fact, in 1983 pay increases for Boston area workers outpaced inflation for the second consecutive year. Even though area workers recorded their lowest pay increases in five years, the area's low inflation rate in 1983 meant a "real" increase in earnings (see Table 20).

TABLE 19

AVERAGE PAY LEVELS IN BOSTON AND 70 LARGE METROPOLITAN AREAS, 1982

	Boston SMSA Relative Pay Level*	Rank Among 70 SMSAs
Office Clerical	95	39
Electronic Data Processing	97	50
Skilled Maintenance	90	55
Unskilled Plant	88	45

* The average pay level for each industry and occupational group in 262 Standard Metropolitan Statistical Areas equals 100.

Source: U.S. Department of Labor, Bureau of Labor Statistics, July 1983, "Wage Differences Among Metropolitan Areas, 1982." Summary 83-5. See also, BLS, "Annual Pay Levels for Metropolitan Areas, 1982." USDL 84-71.

TABLE 19B

AVERAGE PAY FOR SELECTED JOBS LISTED IN MASSACHUSETTS JOB BANKS, MARCH 1981

Occupation	Pay offered in Boston
Professional, technical, management	
Architect & engineering	$20,294
Mathematics & physical science	20,256
Life & social science	15,057
Medicine & health	12,983
Education	12,860
Managers	15,053
Clerical, sales	
Steno, typing & related	$ 8,721
Computing accounts & records	8,255
Product & stock clerk	9,104
Miscellaneous clerical	8,726
Miscellaneous sales	8,143
Service	
Domestic	$ 3.94/hr.
Food & beverage preparation	4.07/hr.
Protective services	3.92/hr.
Building & related products	4.15/hr.
Other service	4.00/hr.
Benchwork	
Scientific & electrical equipment	$ 4.50/hr.
Textiles & leather	3.76/hr.
Metal products	3.40/hr.
Other benchwork occupations	4.70/hr.

Source: Massachusetts Division of Employment Security, Annual Planning Information Report, Boston SMSA, Labor Area Research Publication, June 1981, Doolittle, et. al., Future Boston.

Note: Poverty level for an urban family of four was $8,450 in 1980.

TABLE 20

PERCENT CHANGES IN EARNINGS AND CONSUMER PRICES,
BOSTON AREA, 1978-83

Occupational Group	1978-1979	1979-1980	1980-1981	1981-1982	1982-1983
			Earnings		
Office Clerical	7.9	9.2	11.1	8.0	6.4
Electronic Data Processing	8.0	8.7	10.9	8.1	6.1
Skilled Maintenance Trades	7.6	9.6	10.3	8.8	5.9
Unskilled Plant	8.0	9.2	9.1	8.0	7.7
			Consumer Price Index[1]		
	11.5	12.2	11.9	3.3	2.1
			"Real" Earnings[2]		
Office Clerical	-3.6	-3.0	-0.8	4.7	4.3
Electronic Data Processing	-3.5	-3.5	-1.0	4.8	4.0
Skilled Maintenance Trades	-3.9	-2.6	-1.6	5.5	3.8
Unskilled Plant	-3.5	-3.0	-2.8	4.7	5.6

[1] Percent change in the Boston Consumer Price Index for Urban Wage Earners and Clerical Workers, September to September.

[2] "Real" earnings reflect adjustments for the impact of price increases.

Source: U.S. Department of Labor, Bureau of Labor Statistics, News Release, October 27, 1983, USDL-185.

BOSTON'S BUSINESS

Boston's Business Establishments and the Role of Services Activities

Private business establishments in Boston provided over 80 percent of all jobs in the City in 1982; (government and social nonprofit agencies accounted for 16 percent and 4 percent of total employment, respectively). In that year, Boston's 16,550 business establishments employed 446,000 workers. See Table 21. Detailed information on Boston's businesses and their employees, in 1982, recently published by the U.S. Bureau of the Census, in their "County Business Patterns" series, sheds light on Boston's economic structure, especially on services activities.

In 1982, 6,396 services businesses in Boston had 189,569 employees, or 42 percent of all private employment in the City.

Health services dominated with 54,317 workers (12 percent of private employment) including 49,194 workers in 28 hospitals, 83 nursing and personal care facilities and 42 outpatient facilities. Doctor and dentist offices (755) and laboratories made up the remainder. Boston's hospitals serve a regional, national and international clientele.

Business services followed in importance, with 1,120 establishments and 32,532 workers (7 percent of the total), including concentrations in advertising and personnel services, building services, and computer and data processing.

Educational services were third with 30,151 workers, centered principally in 31 colleges and universities with 27,230 employees. Boston students come from the region, the nation, and the world.

Professional services are significant in Boston and include 8,708 workers in legal services, 16,987 workers in engineering and architecture, 4,270 in accounting, auditing, and bookkeeping, and 2,631 in noncommercial research.

Finance in Boston, in 1982, was served by 2,072 businesses and 69,750 workers (17 percent of the total). This included 249 banking establishments with 18,129 workers, 7,131 workers in the brokerage business, and 2,160 in investment holding companies. Boston banks and investment banking houses have financed development in the nation and the world for more than a century and a half. Boston continues as the leader of the nation's mutual fund industry and is one of the nation's leading money management centers.

The report on business establishments provides significant insight on other aspects of today's Boston economy. Hotels and lodging places, rapidly growing, had 5,321 employees in 1982. In retail trade, 1,230 eating and drinking places dominate with 23,156 workers (5 percent of the total), ranking food stores which have 8,197 employees, and the now expanding general merchandise stores, with 4,617 workers. Communica-

TABLE 21

BUSINESS ESTABLISHMENTS AND EMPLOYEES BY DETAILED INDUSTRIES
SUFFOLK COUNTY (BOSTON), 1982*

SIC Code	Industry	Establishments		Employees	
		Number	Percent Composition	Number	Percent Distribution
	Agriculture, Forestry, Fisheries	57	.3	413	.1
07	Agricultural Services	44	.3	200	.1
09	Fishing	9	.1	-	-
	Mining	6	.1	31	-
	Contract Construction	762	4.6	16,910	3.8
15	General Contractors	208	1.3	-	-
16	Heavy Construction	45	.3	-	-
17	Special Contractors	509	3.1	6,117	1.4
	Manufacturing	1,046	6.3	53,665	12.0
20	Food Products	82	.5	5,671	1.3
22	Textile Mill Products	20	.1	1,097	.2
23	Apparel and Other Textiles	162	1.0	6,393	1.4
24	Lumber and Wood	20	.1	-	-
25	Furniture and Fixtures	28	.2	673	.2
26	Paper Products	26	.2	1,454	.3
27	Printing and Publishing	319	1.9	14,725	3.3
28	Chemicals and Drugs	27	.2	1,414	.3
30	Rubber and Plastics	19	.1	872	.2
31	Leather Products	22	.1	1,070	.2
32	Stone, Clay, and Glass	12	.1	294	.1
33	Primary Metals	12	.1	386	.1
34	Fabricated Metals	71	.4	3,582	.8
35	Non-Electrical Machinery	57	.3	3,723	.8
36	Electronic Equipment	41	.2	2,231	.5
37	Transportation Equipment	13	.1	1,480	.3
38	Instruments	27	.2	2,190	.1
39	Miscellaneous Manufacturing	50	.3	1,327	.3
	Transportation/Communication/ Utilities	685	4.1	35,972	8.1
41	Local Passenger Transit	94	.6	2,223	.5
42	Trucking and Warehousing	180	1.1	3,133	.7
44	Water Transportation	30	.2	-	-
45	Air Transportation	55	.3	8,573	1.9
47	Transportation Services	198	1.2	2,627	.6
48	Communication	87	.5	12,823	2.9
49	Electric/Gas/Sanitary Services	21	.1	5,584	1.3
	Wholesale Trade	1,423	8.6	21,813	4.9
50	Durable Goods	698	4.2	11,133	2.5
51	Non-Durable Goods	709	4.3	10,098	2.3
	Retail Trade	3,829	23.1	57,415	12.9
52	Building Materials	95	.6	-	-
53	General Merchandise	66	.4	4,617	1.0

TABLE 21 (continued)

Sic Code	Industry	Establishments Number	Establishments Percent Composition	Employees Number	Employees Percent Distribution
54	Food Stores	477	2.9	8,197	1.8
55	Auto Dealers/Service Stations	281	1.7	2,452	.5
56	Apparel and Accessories	393	2.4	3,369	.8
57	Furniture and Furnishings	192	1.2	1,310	.3
58	Eating and Drinking Places	1,230	7.4	23,156	5.2
59	Miscellaneous Retailing	1,051	6.4	9,043	2.0
	Finance/Insurance/Real Estate	2,072	12.5	69,750	15.6
60	Banking	249	1.5	18,129	4.1
61	Credit Agencies	167	1.0	-	-
62	Security and Commodity Brokers	214	1.3	7,131	1.6
63	Insurance Carriers	188	1.1	24,011	5.4
64	Insurance Agents	345	2.1	6,593	1.5
65	Real Estate	706	4.3	8,108	1.8
67	Holding and Investment	178	1.1	2,160	.5
	Services	6,396	38.6	189,569	42.5
70	Hotels and Lodging	77	.5	5,321	1.2
72	Personal Services	586	2.5	4,196	.9
73	Business Services	1,120	6.8	32,532	7.3
(731)	Advertising	109	.7	1,759	.4
(732)	Credit/Mailing/Photography	158	1.0	1,894	.4
(734)	Building Services	105	.6	4,104	.9
(736)	Personnel Services	120	.7	7,746	1.7
(737)	Computer and Data Processing	86	.5	2,036	.5
(739)	Miscellaneous Services	535	3.2	14,875	3.3
75	Auto Repair and Services	420	2.5	36,83	.8
76	Miscellaneous Repair	135	.8	932	.2
78	Motion Pictures	112	.7	-	-
79	Amusement and Recreation	139	.8	3,460	.8
80	Health Services	1,039	6.3	54,317	12.2
81	Legal Services	995	6.0	8,708	2.0
82	Educational Services	167	1.0	30,151	6.8
83	Social Services	371	2.2	9,492	2.1
84	Museums and Gardens	16	.1	1,093	.2
86	Membership Organizations	594	3.6	8,124	1.8
89	Miscellaneous Services	574	3.5	24,450	5.5
(891)	Engineering and Architecture	248	1.5	16,987	3.8
(892)	Non-commercial Research	29	.2	2,631	.6
(893)	Accounting/Auditing/ Bookkeeping	194	1.2	4,270	1.0
(899)	Unclassified Services	103	.6	562	.1
-	Non-Classifiable Establishments	275	1.7	470	.1
Total		16,550	100.0	446,008	100.0

* Boston comprises 96 percent of Suffolk County employment. Sum of 2-digit establishments and employment do not add to totals because non-classified 2-digit administrative and auxiliary units not included in this list.

\- Means data was classified and confidential and not disclosed.

Source: U.S. Bureau of the Census, County Business Patterns, Massachusetts, 1982, March 1984.

tions dominate "Transportation and Communications" with 12,823 workers, followed by air transportation with 8,573 employees, reflecting Boston's role as a business and tourist cross-road and as a disseminator of information and knowledge.

In manufacturing, printing and publishing, apparel, and food processing lead with 26,789 workers, though the most rapidly growing industries--fabricated metals, machinery, electronics, transportation equipment and instruments--comprise 11,016 employees.

Most Boston businesses are small. Two-thirds of all establishments had less than ten employees, and another 23 percent had between 10 and 49 employees. Only one percent of all establishments had more than 250 employees (but these accounted for one-third of total jobs).

The top twenty growth sectors in the metropolitan area were led by business services (see Table 22) and other service, finance and manufacturing industries.

High Technology Industry

The high technology industry of the Boston Metro Region is a mainstay and one of the most rapidly growing segments of the State economy, and contributed importantly to mild impact of the 1981-82 recession and the smart resurgence of 1983 and 1984. Six high tech firms are among the fifteen largest employers of the Boston area, according to the Financial Times Survey. See Table 23.
Employment in high technology companies, including computer and information processing equipment firms, as well as those engaged in defense electronics, drug manufacture, biotechnology, robotics and medical instruments makes up more than a third of all manufacturing jobs in Massachusetts, and experienced a 42 percent growth, from 1976 to 1981, in comparison with twelve percent for Massachusetts' manufacturing industry as a whole. See Table 24.

The information processing equipment firms include the Digital Equipment Company, the second largest computer company in the world after IBM, Wang Laboratories, the leading office automation company, and Data-General, a mini-computer firm. Computervision provides equipment for computer-aided manufacturing. Software companies include Cullinet, Lotus Development and Spinnacker Software. The more established high technology firms with major facilities in the Boston area include Honeywell, Raytheon, Polaroid, and General Electric.

Publishing

Boston's publishing industry, dating back to the early 19th century, continues to thrive on new entrepreneurial directions and the

TABLE 22

PERCENT CHANGE IN EMPLOYMENT, BY TYPE OF BUSINESS,
TOP TWENTY IN DESCENDING ORDER
METRO AREA

	1967-1980			1976-1980		
Rank	SIC	Type of Business	% Change	SIC	Type of Business	% Cha
1	73	Business Services	139.5	73	Business Services	69
2	83	Social & Non-Profit	123.7	70	Hotels & Lodging	59
3	79	Amusement & Recreation	121.3	33	Primary Metal	50
4	80	Health Services	108.9	83	Social & Non-Profit	45
5	81	Legal Services	93.0	82	Educational Services	37
6	64	Insurance Agents	84.7	79	Amusement & Recreation	35
7	58	Eating & Drinking	75.5	35	Machinery ex. Electric	34
8	89	Eng., Arch. Acc., Misc. Services	64.7	58	Eating & Drinking	34
9	82	Educational Services	60.3	81	Legal Services	33
10	61	Credit Agencies	48.6	61	Credit Agencies	32.
11	59	Drug, Liqu., Mail Ord., Misc. Retail	46.7	89	Eng., Arch., Acc., Misc. Services	31.
12	75	Auto Repair	40.4	65	Real Estate	29
13	60	Banking	40.0	80	Health Services	29.
14	65	Real Estate	38.9	64	Insurance Agents	27.
15	35	Machinery ex. Electric	36.5	36	Electric Equipment	26.
16	70	Hotels & Lodging	34.3	75	Auto Repair	22.
17	76	Elec., Watch, Jewel,	27.5	27	Printing & Publishing	20.
18	54	Food Stores	24.1	34	Fabricated Metal	20.
19	55	Auto Dealers-Service	11.2	26	Paper	19.
20	56	Apparel-Retail	10.8	25	Furniture & Fixtures	16.

Source: U.S. Department of Commerce, Bureau of the Census, County Business Patterns, Massachusetts, Annual Reports.

TABLE 23

TOP 15 EMPLOYERS
(In Boston Area)

Company	City	Number of Employees
Raytheon Corp.	Lexington	72,000
Digital Equipment	Maynard	67,100
Gillette Co.	Boston	30,200
Stop & Shop Companies	Boston	29,000
J. Hancock Mutual	Boston	20,216
Wang Laboratories	Lowell	19,760
Liberty Mutual	Boston	18,791
Data General	Westboro	15,210
Poloroid	Cambridge	14,540
Bank of Boston	Boston	13,000
M/A-Com	Burlington	8,739
Eastern Gas & Fuel Assoc.	Boston	8,470
New England Mutual	Boston	8,218
Dennison Manufacturing	Framingham	8,200
Cabot Corporation	Boston	7,500

Research: Rivka Nachoma

Source.: The Financial Times Survey, March 6, 1984, London.

TABLE 24

HIGH TECHNOLOGY EMPLOYMENT IN MASSACHUSETTS

Industry	Employment						
	1976	1977	1978	1979	1980	1981	Change % 1976-81
Drugs	2,079	2,059	2,283	2,694	2,723	2,831	36.2
Ordinance and accessories	4,586	4,921	4,894	5,124	5,447	5,559	21.2
Office of computing and accounting machines	21,386	27,060	31,459	39,116	46,142	48,575	127.1
Electrical and electronic machinery, equipment and supplies	83,800	91,000	98,300	104,000	110,500	111,300	32.8
Guided missiles and space vehicles and parts	11,294	11,819	12,158	12,317	11,647	11,289	-
Miscellaneous transportation equipment	1,872	1,660	1,456	1,113	1,062	1,336	-28.6
Instruments, photographic, medical and optical goods, watches and clocks	45,100	51,500	56,400	57,500	58,500	61,300	35.9
Total	170,117	190,019	206,950	222,464	236,021	242,190	42.4
All manufacturing	593,600	621,100	652,100	672,100	674,900	666,800	12.3
High tecnology as a percentage of all manufacturing	28.7	30.6	31.7	33.1	35.0	36.3	

Research: Rivka Nachoma

Source: The Financial Times Survey, March 6, 1984, London.

City's intellectual and literary ambience.* Houghton-Mifflin, founded in 1832, published works of Nathaniel Hawthorne and Ralph Waldo Emerson. Little Brown, established in 1837, printed Louisa May Alcott. Beacon Press has just celebrated its 130th anniversary. These venerable publishing houses, and newer ones, including the Atlantic Monthly Press, David Godine, the Boston Publishing Company, and others are thriving on software books, electronic publishing, textbooks, and trade publications. With its universities, Boston is the leader among all major cities in per capita purchases in bookstores, according to the Bureau of Industrial Economics of the U.S. Department of Commerce. This is said to make Boston congenial to industry, which has a strong presence here even with the leadership and ties to New York. Boston publishing has always been nationally focused, with abolitionist works in the nineteenth century and books on feminist concerns and tracts by black writers in recent times.

The Communications-Information-Knowledge Industries

Boston has a strong foothold in the communications-information-knowledge industries, encompassing communications, business and professional services, finance and high technology equipment production activities, and the potential is extraordinary. These activities represent 37 percent of the City's employment and 28 percent of the value of production, and their projected 50 percent growth to 1990 will dominate, raising the knowledge industry's share of employment in the Boston economy to 47 percent in that year, according to a 1982 study of the Boston Redevelopment Authority (The Communications-Information-Knowledge Industries, and the Potential for Boston). For the nation as a whole, in comparison, the knowledge industries account for a smaller share (24 percent) of employment and production (19 percent), which are projected to grow by one-fourth and one-third, respectively, to 1990.

Retail Trade

The Boston area's retail trade sector is extensive. Fourteen major shopping centers serve the region (see Figures 9 and 10) and specialize in goods for national and international visitors. Downtown Crossing, Faneuil Hall, Newbury Street, Boylston Street, Copley Place and the Prudential Center are primary shopping districts located in the City of Boston.

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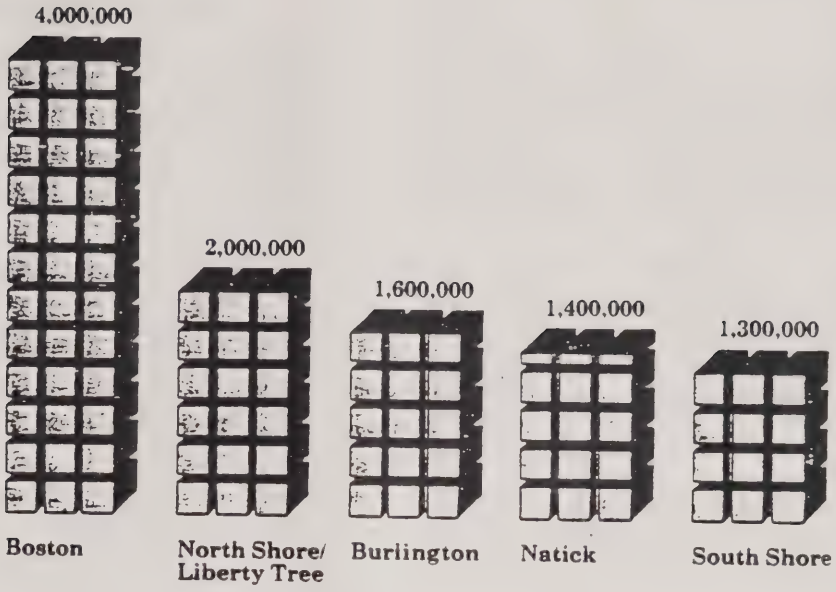
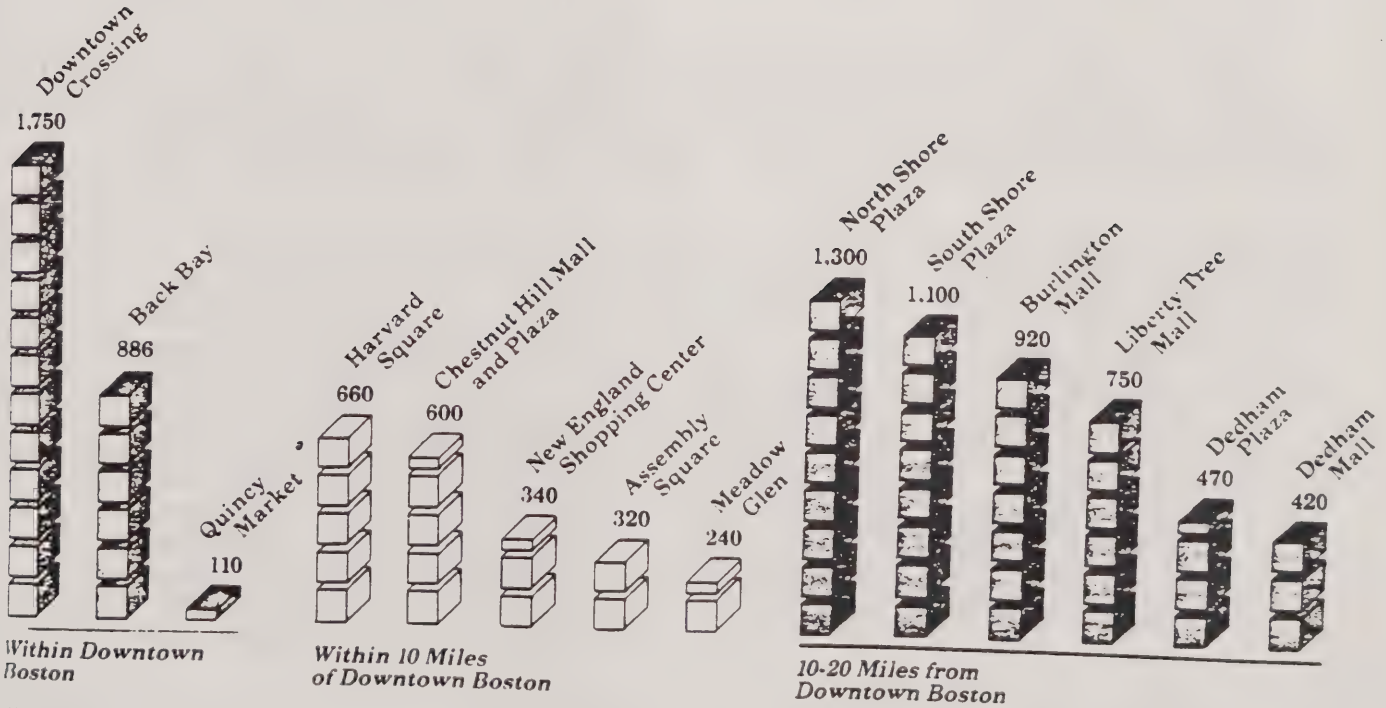
* Edwin McDowell, New York Times, May 1, 1984, article entitled "Boston Publishing Quietly but Rapidly Modernizes".

FIGURE 10

RETAIL SPACE IN MAJOR RETAIL CENTERS



Gross leasable area of major regional retail (in square feet).



Comparison goods (GAFO) retail space in major regional malls (in thousands of square feet)

Source: BRA, Downtown Crossing.

Education and Medicine

The City's educational and medical institutions are an important component of its economy. The City has 35 hospitals, including Massachusetts General, University, and the Boston City Hospitals and the New England Medical Center. In addition, the City is the home of the medical and dental schools of Harvard, Tufts, and Boston Universities.

There are 65 colleges and universities in the Boston metropolitan area, at which approximately 250,000 students are enrolled; 125,000 attend institutions in the City. When trade and vocational schools are taken into account, the metropolitan area has over 100 institutions of higher education. The City has more students in relation to population than any other major U.S. city.

Educational and medical institutions provide employment opportunities for residents of the City and its metropolitan area. In addition, expenditures by the institutions' students, patients and visitors are important to the City's trade and service sectors.

The presence of large and growing institutions generates pressure on the City's neighborhoods and housing stock, and public policy is much concerned with balancing institutional growth with neighborhood preservation and needs.

Culture and Tourism

The City has long been recognized as a cultural center. Many organizations are devoted to the various arts and sciences, including major museums such as the Museum of Fine Arts and the Museum of Science, and well-known performing groups such as the Boston Symphony Orchestra and the Boston Pops.

The City is experiencing an increase in the number of tourists with the completion of new facilities including the Faneuil Hall Marketplace, Copley Place and the John F. Kennedy Library which are attracting large numbers of tourists, and the role of national demographic and personal income growth factors and dollar devaluation factors. According to data compiled by the Greater Boston Convention and Tourist Bureau and the Boston Redevelopment Authority, the number of tourists visiting the City increased from 2.9 million in 1970 to 5.5 million in 1980. Between 1970 and 1976 the number of tourists rose steadily, reaching a peak of 5.2 million in the bicentennial year of 1976. This was followed by a post-bicentennial slump in 1977 to a level of 4.8 million, a rise in 1980 to 5.5 million, and a leveling off at 5.6 million tourists anticipated for 1984.

Taxes in the Boston Area

The following taxes apply to sales and services in the Boston area:

Sales and Use Tax

Five percent on gross receipts of sales (including rental) or the storage, use or consumption of tangible personal property.

Exemptions

Machinery, replacement parts thereof, materials, tools and fuel used directly and exclusively in an industrial plant, in furnishing power to an industrial plant, in agricultural production; and in commercial fishing; food for human consumption; utilities; clothing for human wear up to $175 of sales price of any articles used as wearing material; footwear; newspapers; magazines; schoolbooks; prescription drugs; sales of vessels and barges 50 tons or over constructed in Massachusetts and sold by the shipbuilder; fuel, supplies of fuel and repairs for vessels engaged in foreign and interstate commerce; fuel for heating purposes; motion picture films for commercial exhibition; property ordinarily sold by funeral directors; motor vehicles purchased by and specially equipped for paraplegics; casual and isolated sales under given conditions; etc. Gifts of scientific equipment to nonprofit educational institutions.

Miscellaneous

Room Occupancy - 5.7 percent of total amount of rent for each occupancy.

Alcoholic Beverages and Alcohol Excise - Malt beverages $3.30 per barrel (31 gals.), Cider $.03 per wine gallon. Still wine (including vermouth) $.55 per wine gallon. Sparkling wines and champagne $.70 per wine gallon. All alcoholic beverages containing 15 percent or less alcohol $1.10 per wine gallon; beverages containing between 15 percent and 50 percent of alcohol $4.05 per wine gallon; beverages containing more than 50 percent of alcohol $4.05 per proof gallon.

Cigarettes - 26 cents per package of 20.

Gasoline - 10 percent of wholesale selling price with a minimum of 11 cents per gallon.

Employment Security Contributions - 7 schedules with rates ranging .4 percent to 6.0 percent plus Solvency Tax up to an addition 1 percent. Current schedule is 2.6 percent to 6.4 percent (including Solvency Tax) on wage base of first $7,000.

Public Utilities - 6.5 percent (net income and allocated net income of interstate companies).

Local Property Taxes - Fair cash value of real and personal property. Rates fixed annually by the local board of assessors and must be approved by the State Tax Commission. Tax administered and collected at local level.

All noncorporate businesses are taxed on personal property; all nonmanufacturing corporations are taxed on machinery used in the conduct of business.

Motor Vehicle Excise - $25 per $1,000 of valuation.

ECONOMIC PROSPECTS FOR THE REGION

The national economy appears headed for strength in 1984, with a 6.5 percent growth in real Gross National Product (adjusted for inflation), a diminishing unemployment rate and a 4.5 percent rate of inflation anticipated, for the year as a whole. In 1985, the rate of economic growth is projected to taper off. Contrary to previous national recovery periods, unemployment rates are expected to remain high at around 7.5 percent through 1985.

The New England region's economic structure--featuring high technology manufacturing, business and professional services, higher education and medicine--places the region in a favorable position relative to the nation.

Current reports indicate that 1984 will be a year of strong economic growth in the Boston area, the state and the region. New England's high technology companies, largely concentrated in the Boston metropolitan area, resumed employment expansion early this year after a two-year lull. Furthermore, the Massachusetts Division of Employment Security reported in July that more people were working in Massachusetts than at any time in the state's history. In the latest report on unemployment (July 1984), the Massachusetts jobless rate was 4.2 percent, the lowest July since 1970, and the lowest unemployment rate among the ten largest industrial states. In the City of Boston, private development completions will be at an all-time high in 1984 (see Part II). Development scheduled for the next several years should sustain the expansion and transformation of the City's economic base. Thus, the City has strong growth potential through 1990, especially in finance and services. Boston's employment is projected to expand by 72,000 jobs, or thirteen percent from 1983 to 1990 (see Table 25). Employment growth in firms occupying Boston's expanding office space downtown would account for nearly one-half of the net new jobs. (See Table 26.)

TABLE 25

CITY OF BOSTON EMPLOYMENT, 1983 AND 1990

INDUSTRY	1983	1990	CHANGE NUMBER	CHANGE PERCENT
AGRI.MINING	566	514	- 52	- 9.2
CONSTRUCTION	10,346	12,545	2,199	21.3
MANUFACTURING	46,989	55,250	8,261	17.6
TRANSPORTATION-PU.	39,514	40,599	1,085	2.7
WHOLESALE TRADE	26,028	27,481	1,453	5.6
RETAIL TRADE	56,522	62,649	6,127	10.8
FINANCE-INS-RE	76,245	90,446	14,201	18.6
SERVICES	199,017	238,131	39,114	19.7
HOTEL	6,568	10,707	4,140	63.0
MEDICAL	62,690	74,890	12,199	19.5
EDUCATIONAL	30,848	31,719	871	2.8
CULTURAL	4,975	5,576	601	12.1
SOCIAL-NONPROFIT	20,698	22,813	2,115	10.2
BUSINESS	35,425	47,281	11,856	33.5
OTHER	37,813	45,145	7,332	19.4
GOVERNMENT	91,717	93,599	1,882	2.1
PROPRIETORS	12,699	10,260	- 2,439	-19.2
TOTAL ALL SECTORS	559,643	631,474	71,831	12.8

SOURCE: MASSACHUSETTS DIVISION OF EMPLOYMENT SECURITY,
ES-202 EMPLOYMENT SERIES AND EMPLOYMENT PROJECTIONS;
U.S.DEPARTMENT OF COMMERCE, BUREAU OF ECONOMIC ANALYSIS,
UNPUBLISHED EMPLOYMENT SERIES, SUFFOLK COUNTY;
BUREAU OF THE CENSUS, COUNTY BUSINESS PATTERNS, MASSACHUSETTS.

08.07.84 JPB

Projection: From Gregory Perkins, Boston Redevelopment Authority, "The Future of the Boston Economy" (Report in Preparation). Based in part, on Projections of the U.S. Bureau of Labor Statistics and the Massachusetts Division of Employment Security.

TABLE 26

OFFICE EMPLOYMENT, DOWNTOWN BOSTON, 1983 AND 1990

INDUSTRY	1983	1990	CHANGE NUMBER	CHANGE PERCENT
AGRI.MINING	74	65	- 8	-11.2
CONSTRUCTION	1,242	1,741	499	40.2
MANUFACTURING	4,699	5,599	900	19.2
TRANSPORTATION-PU.	27,660	28,513	853	3.1
WHOLESALE TRADE	1,301	1,389	87	6.7
RETAIL TRADE	2,826	3,194	368	13.0
FINANCE-INS-RE	51,846	63,349	11,503	22.2
SERVICES	67,666	83,937	16,271	24.0
BUSINESS	23,683	29,378	5,695	24.0
PROFESSIONAL	43,983	54,559	10,576	24.0
GOVERNMENT	17,426	17,844	418	2.4
PROPRIETORS	4,953	3,779	- 1,173	-23.7
TOTAL ALL SECTORS	179,693	209,410	29,718	16.5

SOURCE: MASSACHUSETTS DIVISION OF EMPLOYMENT SECURITY,
ES-202 EMPLOYMENT SERIES AND EMPLOYMENT PROJECTIONS;
U.S.DEPARTMENT OF COMMERCE, BUREAU OF ECONOMIC ANALYSIS,
UNPUBLISHED EMPLOYMENT SERIES, SUFFOLK COUNTY;
BUREAU OF THE CENSUS, COUNTY BUSINESS PATTERNS, MASSACHUSETTS.

08.07.84 JPB

Projection: From Gregory Perkins, Boston Redevelopment Authority, "The Future of the Boston Economy" (Report in Preparation). Based in part, on Projections of the U.S. Bureau of Labor Statistics and the Massachusetts Division of Employment Security.

TRANSPORTATION NETWORK

The City is a major national and international air terminus, a seaport, and the center of New England's rail, truck and bus services. The City is served by three limited access interstate highways which connect it to the national highway system, including the Massachusetts Turnpike which traverses the Commonwealth from the border of New York State directly to downtown Boston.

The emphasis in transportation planning has shifted away from the highway-dominated programs of the past and towards a public transit orientation. Investment in public transportation has been facilitated by federal transportation legislation that has enabled the Massachusetts Bay Transportation Authority to receive a total of approximately $2.3 billion since 1965; $317 million of this total was received in 1981 and $281 million in 1982 and $265 million in 1983 for projects in Boston. The current transportation capital program for the next ten years envisions an investment of about $3 billion in the City's urban area, funded principally by the Federal government.

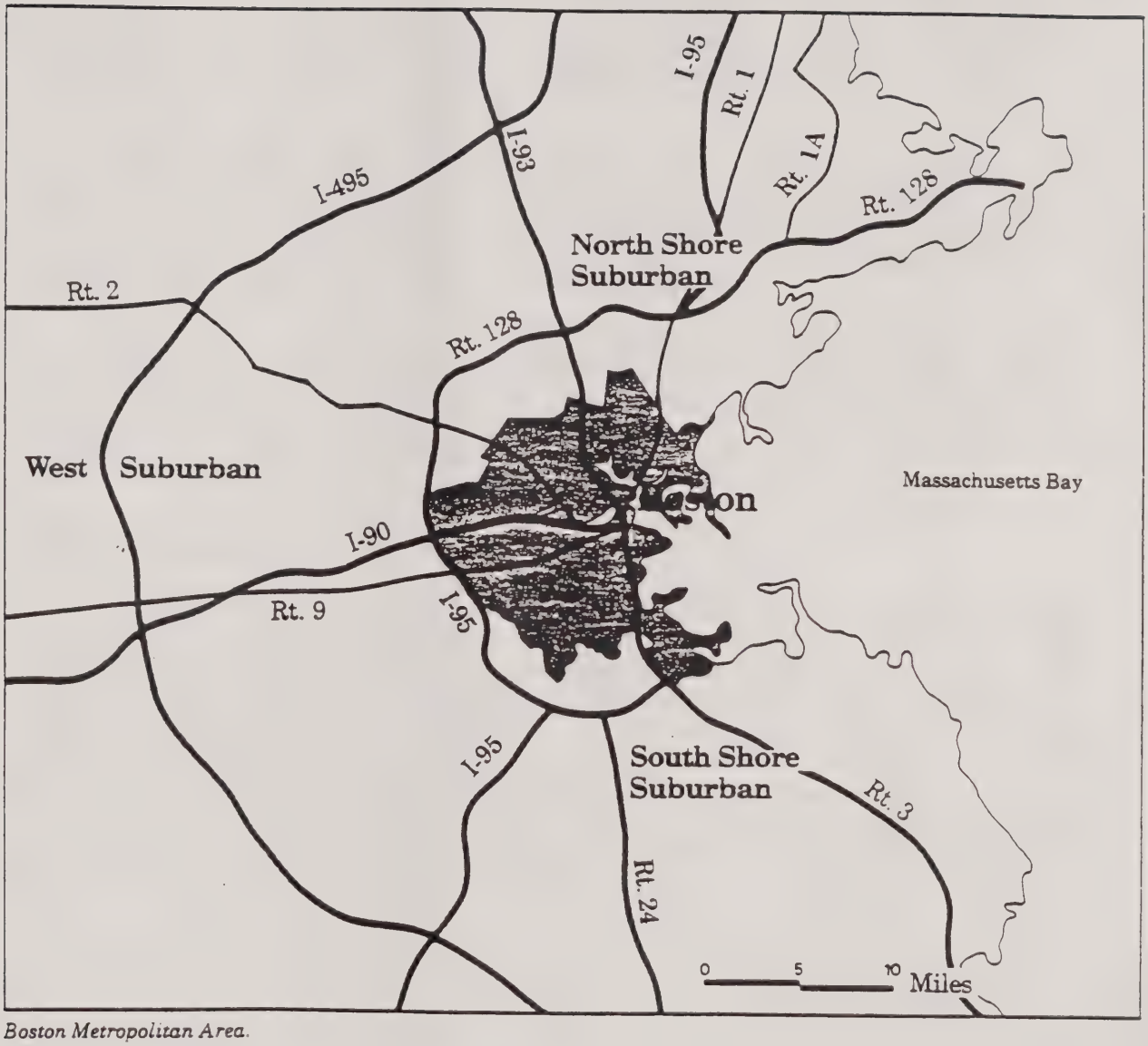
Important improvements are being made to Boston's mass transit system. Work underway includes the modernization of Red Line stations and tunnels to increase capacity, as well as systemwide signalling and communication improvements designed to reduce travel times. But by far, the most significant component of the ongoing improvements to the City's transit system, is the continued progress on the Southwest Corridor Project (SWCP). The relocation of the Orange Line, which is the core of the SWCP, is expected to be completed in the second half of 1985. The relocated Orange Line, which stretches eight miles from Downtown Boston to Forest Hills in Jamaica Plain and includes nine new stations, is expected to carry more than 120,000 riders daily. Another 20,000 daily riders will use the new commuter rail and high speed Amtrak lines to be located within the Corridor. To date, approximately $630 million has been invested in the Orange Line relocation and related developments. Another $60 million will be expended through 1985.

In addition to the relocation of the Orange Line, the SWCP has made available over 80 acres of new parkland and nearly 150 acres of developable land. With the opening of the new Orange Line expected in 1985, intensified planning has begun for the Corridor's remaining development parcels. Planning is also underway for replacement service on the Orange Line's existing route along Washington St. Bus routes or some combination of buses and light rail are the favored options. A final decision on the replacement service options is expected soon after the completion of the Environmental Impact Statement in November of 1984.

Another proposed facility of considerable importance to Boston's transportation system is the Central Artery Depression and Third Harbor Tunnel Project, whose funding, under the federal interstate highway program, is under consideration by Congress. The project, with an estimated cost of $2.2 billion, would involve ten to fifteen years of construction time. The benefits of the Central Artery/Harbor Tunnel project are numerous. They include a 65 percent reduction of traffic

FIGURE 11

MAJOR HIGHWAYS



Boston Metropolitan Area.

Source: BRA, Downtown Crossing.

congestion along the Artery, sufficient capacity to meet projected vehicular use for the next twenty to thirty years, greatly improved access to Logan Airport and the Port of Boston, and the creation of twenty acres of land and air rights in Downtown Boston.

The Massachusetts Port Authority ("MassPort") was created by the General Court of the Commonwealth as a body politic and corporate to stimulate and support the Commonwealth's economy through development and management of the City's major air and sea transportation centers and the Tobin Bridge over the Mystic River. MassPort is financially independent and the City is not responsible for any debt or other obligations incurred by MassPort.

Since MassPort was formed in 1959, heavy use of Boston-Logan International Airport ("Logan Airport") and the Port of Boston has compelled significant expansion of the facilities. Logan Airport, which is served by 34 domestic and international airlines, recently opened for business the last of five major terminal projects.

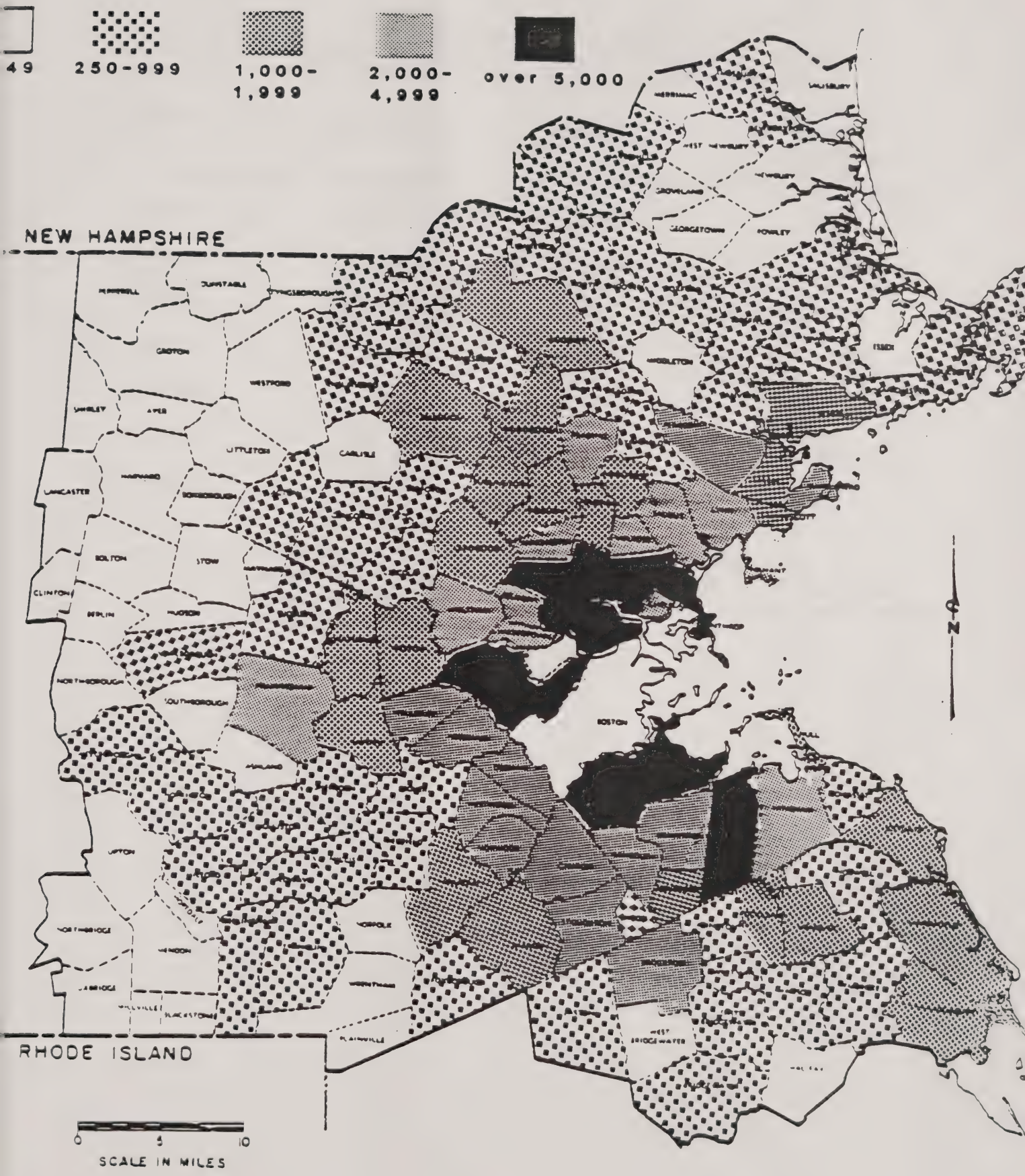
Air travel passengers arriving at and departing from Logan Airport increased at an annual rate of 5 percent between 1970 and 1982. In 1983, Logan Airport served 17.8 million passengers (up 13 percent from 1982), handled 104 million pounds of mail and carried 493 million pounds of cargo on a total of 289,000 flights.

Commuting Patterns

The 1980 Journey-to-Work information (U.S. Census Bureau) provides evidence of extensive commuting in the metro region. According to the survey of work destinations, 59 percent of the workers in the City of Boston were residents of suburban cities and towns. Most of those workers lived in the inner suburbs, but substantial numbers of workers commuted to Boston from cities and towns throughout Eastern Massachusetts, highlighting the dependence of suburban cities and towns on the Boston economy for jobs and income. For seven cities and towns, the share of resident workers working in Boston ranged from 30 to 50 percent (see Table 27 and Figure 12).

FIGURE 12

Commuting Patterns in Eastern Massachusetts
Number of Resident Workers Working in Boston
By City and Town, 1980



Source: U.S. Bureau of the Census

TABLE 27

COMMUTING PATTERNS TO BOSTON, 1980
NUMBER OF WORKERS AND PERCENT WORKING IN BOSTON
TOP SEVEN CITIES AND TOWNS RANKED BY PERCENT

City or Town	All Workers	Working in Boston	Working in Boston As a Percent of All Workers
Brookline	29,177	15,338	49.5
Revere	18,842	7,962	38.4
Quincy	40,820	15,694	35.9
Newton	42,208	13,830	31.0
Dedham	12,393	3,959	30.1
Medford	26,789	8,678	30.0
Everett	16,141	5,355	30.0

Source: U.S. Bureau of the Census, Summary Characteristics for Governmental Units and Standard Metropolitan Statistical Areas, Massachusetts, PHC80-3-23; Place of Work Destinations 1980, Summary Tape File 4.

INVESTMENT ACTIVITY

Private Investment

The private office market in the Boston area remained strong in the first half of 1984, in spite of above normal construction levels in Boston, Cambridge, and the suburbs. The total Boston area first-class office market consists of 42,925,933 square feet, with a vacancy rate of 9 percent (Spaulding & Slye, Third Quarter 1984). In mid-1984, the Boston area was third among the ten largest markets in office buildings under construction (Office Network Inc. 1984). The Boston area also had the lowest vacancy rate in existing buildings among twenty major office markets. Regarding quoted rental rates in existing buildings, Boston's Central Business District averaged $22.76 per square foot, or eighth highest among twenty major markets.

In Boston's downtown, new construction is expected to raise vacancy rates in 1985 in new and existing office space. In Cambridge, computer software companies and established research and development firms continue to grow rapidly. Vacancy rates are declining with the strong absorption of space. In the suburbs, demand for office space is high in towns along Route 128, but vacancies are high in a few of the western towns.

Because of the growing importance of the services sector to the city's economy, the trend in office space construction and utilization is an appropriate index of the city's economic activity. Local studies indicate that office space vacancy rates in the City rose moderately through the mid-1970s, reaching a peak of 14.3 percent in 1977. From 1977 through 1983 local office occupancy surveys reported a consistent decline in vacancy rates from 5.8 percent in 1979 to 2.0 percent in 1983. The fourth quarter 1983 office vacancy rate in the first-class office market in Boston was reported to be 2.0 percent. With the addition of much needed office space in 1984, the Spring vacancy rate rose to 5.5 percent.

New office construction, completed or scheduled to be completed during 1984-1986, is expected to add over 7.5 million square feet of office space in 21 buildings, three of which are public. As of the first quarter of 1984, nine new, private office buildings, totalling 4.4 million square feet, were under construction.

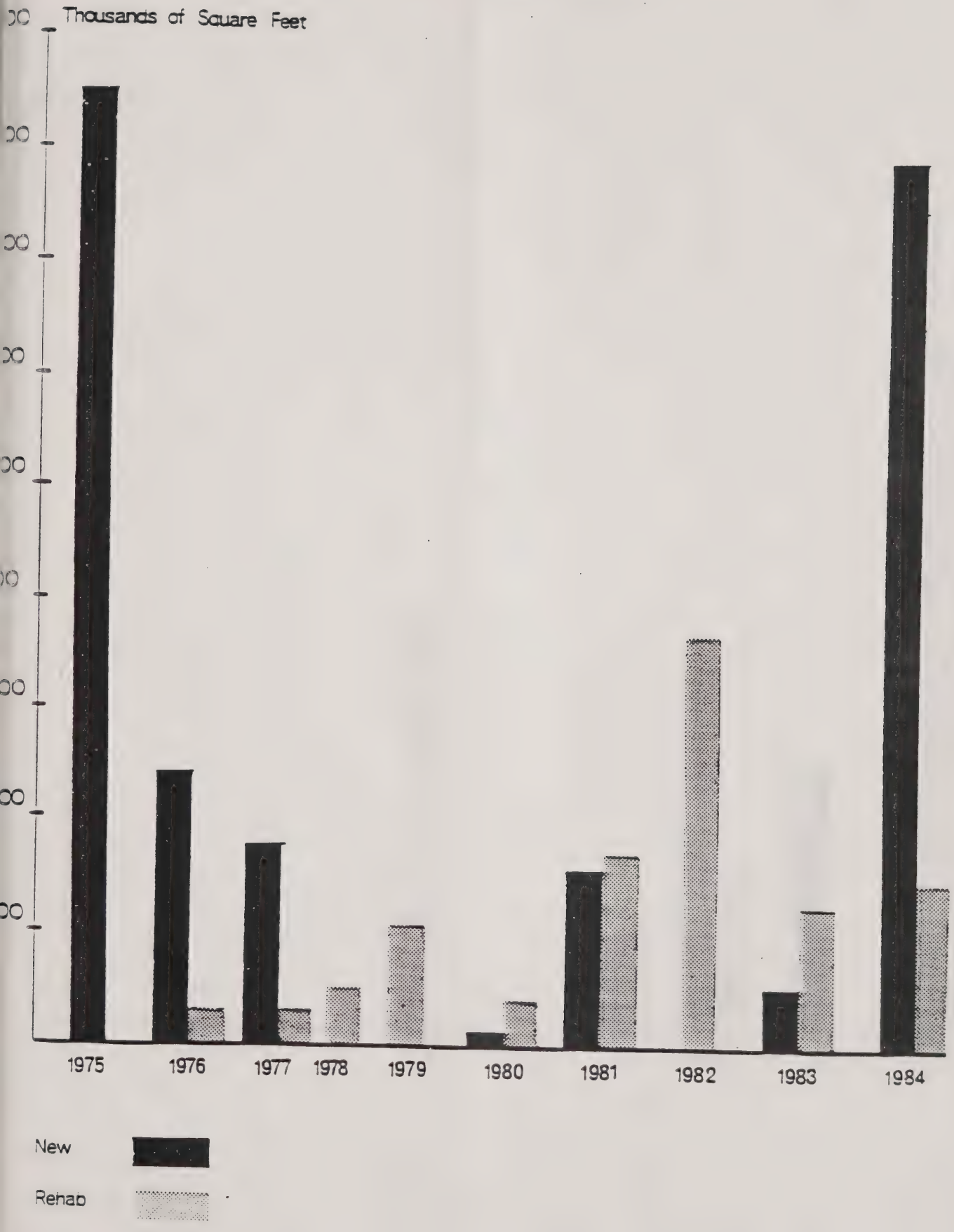
Declining office vacancies and a rise in office rental rates have also induced the rehabilitation of a large amount of older commercial space. Beginning in 1978, renovations of older office buildings have accounted for net additions to office stock through the use of many previously obsolete structures. In addition, several institutions of medicine, culture, and higher education are expanding their facilities. For example, four hospitals and two colleges are now undergoing or planning modest expansion of present space.

According to information from the Economic Development and Industrial Corporation, 2.9 million square feet were acquired and/or

FIGURE 13

New and Rehabilitated Office Space

City of Boston, 1975–1984

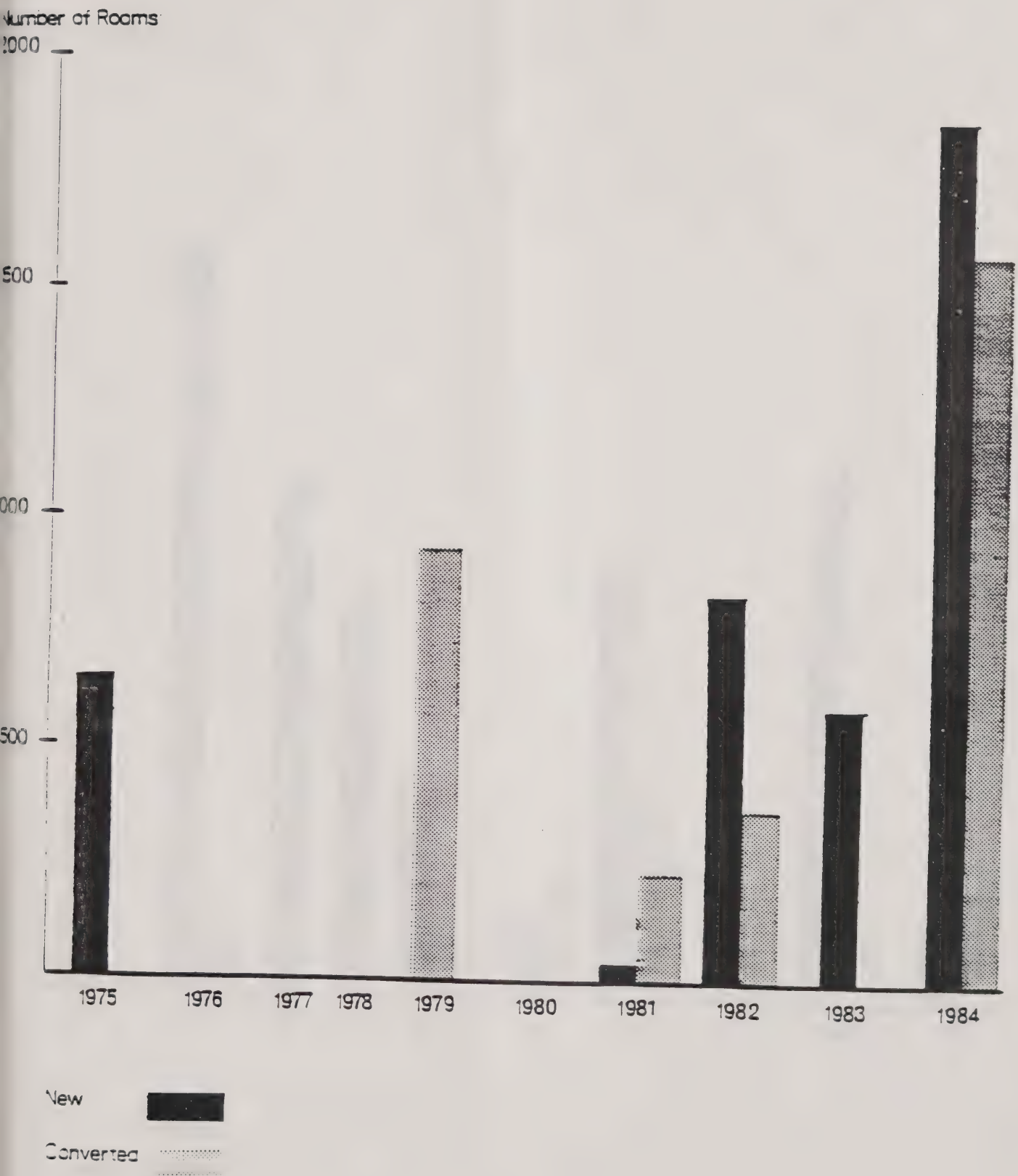


Source: John Avault, Boston's Development

FIGURE 14

New and Rehabilitated Hotel Rooms

City of Boston, 1975-1984

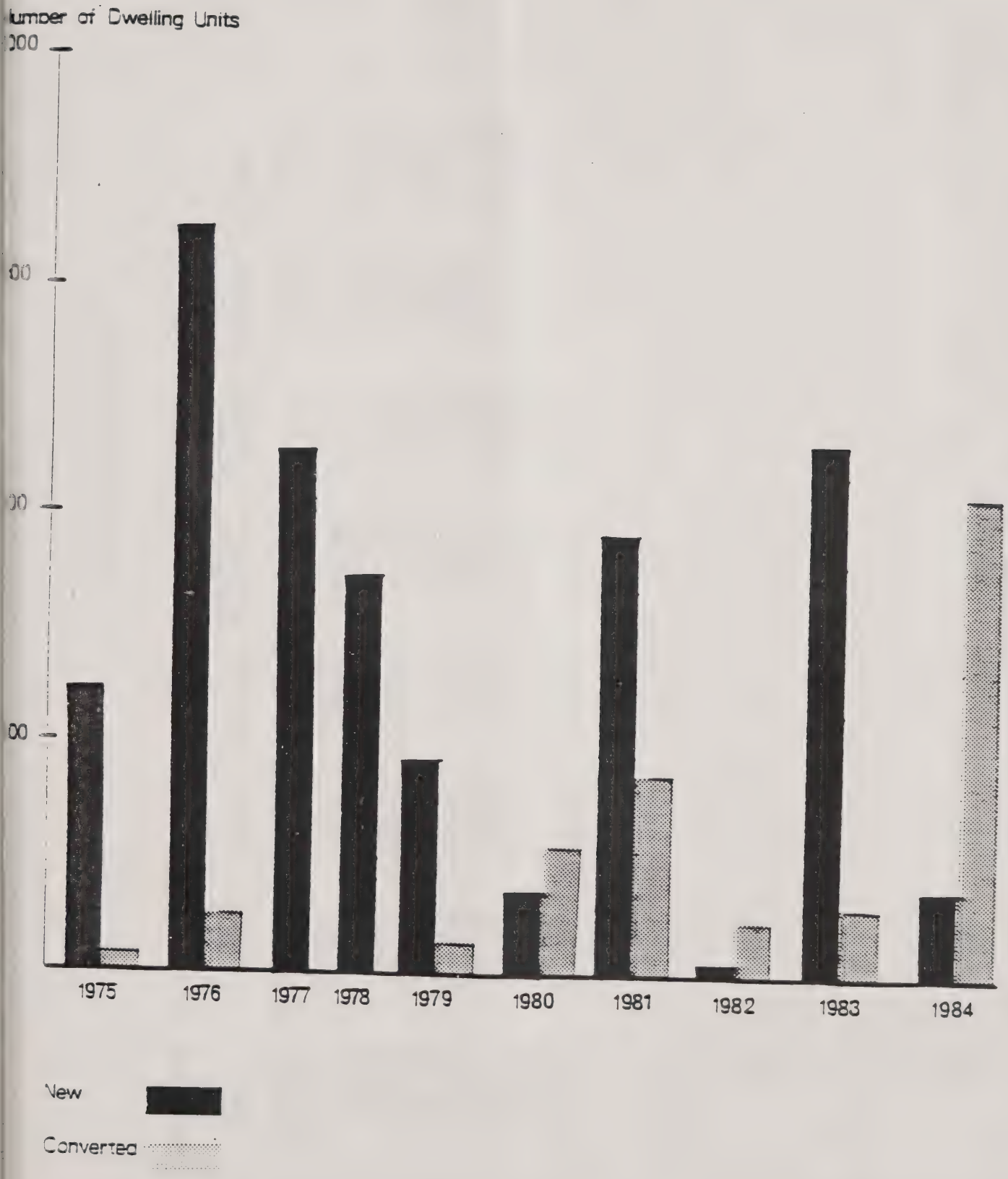


Source: John Avault, Boston's Development

FIGURE 15

Net Additions to Housing Stock

City of Boston, 1975-1984



Source: John Avault, Boston's Developmen

TABLE 28

BOSTON DEVELOPMENT SUMMARY *

COST (1983 CONSTANT $1,000S)

YEAR	OFFICE	RETAIL	MEDICAL	EDUCATIONAL	RECREATION & CULTURAL	PARKING & TRANSPORT.	INDUSTRIAL	HOTEL	EXHIBITION	RESIDENTIAL
1975	$580,850	$11,657	$6,000		$2,400		$3,428	$59,826		$74,751
1976	$146,757	$9,776	$113,567	$3,259	$9,287	$1,629	$1,426			$117,770
1977	$100,078	$17,706		$115,475						$102,936
1978	$13,475	$76,048	$64,508	$8,601	$20,499		$9,153			$57,593
1979	$22,694	$4,618		$21,110	$11,743		$6,973	$10,687		$57,229
1980	$15,590	$4,713	$84,599	$14,865	$7,251		$6,550			$52,880
1981	$163,668	$8,304	$438,686	$13,813	$18,785	$3,315	$39,506	$35,360		$107,205
1982	$91,895	$13,368	$75,566	$521	$8,443	$7,817	$29,109	$98,705		$72,617
1983	$79,858	$14,867	$72,450	$25,000	$14,766	$54,000	$60,730	$122,250	$14,200	$128,622
1984	$597,565	$123,355	$73,500	$28,674	$33,875	$57,140	$46,200	$244,568	$127,500	$89,176
1985	$121,735	$15,115	$36,660	$4,600	$25,070	$117,375	$84,000			$134,045
1986	$294,132	$15,288	$2,000	$6,000	$4,200	$75,320		$60,000		$74,515
1987	$250,000	$21,300	$136,475		$5,000	$45,250		$17,000		$30,000
1988	$156,000	$12,000				$13,000			$100,000	
TOTALS	$2,634,298	$348,116	$1,104,010	$241,918	$161,319	$374,847	$287,076	$648,396	$241,700	$1,099,340

T O T A L S	
1975	$738,912
1976	$403,471
1977	$336,195
1978	$249,878
1979	$135,054
1980	$186,449
1981	$828,642
1982	$398,042
1983	$586,743
1984	$1,421,653
1985	$538,600
1986	$531,455
1987	$505,025
1988	$281,000
TOTAL	$7,141,020

* Private development investment projects, by year of completion, actual, scheduled or planned, excluding land acquisition, financing and other development cost.

TABLE 29

BOSTON DEVELOPMENT SUMMARY

NEW, REHAB, AND CONVERSION
DEVELOPMENT MAGNITUDES

YEAR	OFFICE (S.F.)	RETAIL (S.F.)	MEDICAL (S.F.)	EDUCATIONAL (S.F.)	RECREATION & CULTURAL (S.F.)	PARKING & TRANSPORT. (CARS)	INDUSTRIAL (S.F.)	HOTEL (ROOMS)	EXHIBITION (S.F.)	RESIDENTIAL (D.U.)
1975	5,213,000	136,000	99,000				105,000	698		1,158
1976	1,478,500	75,000	841,630	32,500		400	26,000			1,807
1977	1,223,000	140,000		1,674,000						1,341
1978	330,000	585,000	832,000	127,000			773,100			1,278
1979	616,900	77,500					562,600	900		1,111
1980	385,000	67,300	860,500	56,000			377,690			1,261
1981	2,033,500	109,200	287,000	129,000	132,000	362	1,391,337	710		1,656
1982	2,060,760	198,675	396,096	10,000	100,000	768	949,300	1,350		1,014
1983	1,253,350	280,300	433,000	250,000		1,125	1,002,710	804	205,000	2,181
1984	5,539,120	1,040,332	446,538	325,062	53,000	3,267	1,727,000	3,575	1,150,000	1,536
1985	1,057,580	120,940	237,600	35,000	136,500	2,292	1,835,000			2,318
1986	3,062,970	223,080		55,000		6,032	20,000	760		1,104
1987	2,112,000	174,600			10,000	4,025		160		150
1988	1,200,000	100,000				1,000			701,500	
TOTALS	27,565,680	3,327,927	4,433,364	2,693,562	431,500	19,271	8,769,737	8,957	2,056,500	17,915

Table 30

1984 DEVELOPMENT PROJECT INFORMATION
SUMMARY

Type	Number of Projects	Development Costs (In millions)	Annual Tax Revenue (In Millions)	Jobs Created	
				Permanent	Construction
Office	24	$1,468.7	$43.7	38,433	27,727
Hotels	5	250.0	9.3	1,602	5,624
Retail	10	118.0	4.6	2,635	2,653
Housing	31	429.7	7.5	-	8,918
Institutional	15	291.0	1.5	1,300	6,650
Other	10	794.0	22.9	8,390	17,240
Total	95	3,351.4	89.5	52,390	68,812

Table 31

BOSTON'S HOTEL MARKET
NEW CONSTRUCTION 1980-1986

Year	Hotel Rooms	New Construction* (Rooms)	Number of Hotel Projects
1980	6,925	-	-**
1981	7,335	+ 410**	2**
1982	8,327	+ 992	3
1983	9,131	+ 804***	1
1984	11,076	+1,945***	3
1985	11,376	+ 300***	1
1986	11,836	+ 460***	1
1987	11,996	+ 160***	1
		+5,071	12

* Does not include rehabilitation of existing hotels unless they are net new addition of rooms.

** 1981 construction included one project (80 rooms) as an addition to an existing hotel and the conversion of one building (330 rooms) to hotel use; both are net additions to stock.

*** Under construction or planned.

Source: BRA Research and Development Departments.

rehabilitated in Boston for industrial use in 1983. Among these projects were the multi-million dollar expansions by Teradyne, Inc. and H.P. Hood Inc. and the Economic Development and industrial corporations new Industrial Center at the former Boston Army Base. Industrial facility investments represented every industrial neighborhood of the City.

Responding to a shortage of rooms and to a projected growth in demand, several new hotels have been completed while others are underway or planned. From 1980 to 1983, seven hotel projects added 3,351 new rooms to the city's hotel stock. Two hotel completions will add 800 more rooms. Also, three new hotels, totalling 920 rooms are currently under construction or in an advanced planning stage. In addition, several existing hotels have been renovated. With these new hotels, the number of hotel rooms in the City will have risen from 6,925 in 1980 to 11,996 by 1987, an increase of 73 percent. Occupancy rates rose steadily from a low of 64 percent in 1975 to a peak of 77 percent in 1979. From 1980 through 1983 annual occupancy rates have been lower than the 1979 level. In 1983, the occupancy rate of 68 percent was unchanged from 1982, while room sales (in dollars) were 4.3 percent greater. Data through April 1984 show occupancy rates 1.5 percent above comparable figures for 1983.

Public Investment

Since 1978, public agencies have invested over $450 million per year in the City of Boston's infrastructure (see Table 32). The identified public investment needs are even greater (see Table 33). Public and private investment, together, are expected to play an increasing role in economic activity in Boston in the next three years (see Table 34).

In the suburbs, state and metropolitan authorities have invested heavily in infrastructure. The Metropolitan District Commission manages and maintains major roadways, parks and recreational facilities for 37 cities and towns in the Boston area, supplies water to 45 communities, and provides sewer services for 43 cities and towns with its regional sewer system. The Massachusetts Bay Transportation Authority (MBTA) operates a regional network of subways, trolleys, bus routes, and commuter rail lines. Except for a few private commuter bus lines, the MBTA is responsible for nearly all of Boston's intrametropolitan public transportation. In recent years, most of the MBTA's capital investments have gone toward extension of transit lines to the suburbs and relocation and improvement of one of the central transit and commuter rail lines (The Southwest Corridor Project).

TABLE 32

SUMMARY OF INVESTMENT IN BOSTON'S INFRASTRUCTURE[1] 1978-83
($000's)

	1978	1979	1980	1981	1982	1983
Investments by City Agencies[2]						
Improvements to Public Ways	3,798	9,542	11,108	5,855	1,675	3,576
Renovation of Park and Recreation Facilities	2,297	3,402	3,616	3,109	700	914
Construction and Renovation of Hospital, School, and Other Municipal Buildings	37,853	29,587	21,989	3,074	5,495	13,027
Infrastructure for Community, Economic and and Industrial Development	7,689	21,025	10,634	12,266	8,610	16,030
Sub-total City	51,637	63,556	47,347	24,304	16,480	33,547
Investments by State Agencies and Semi-Autonomous Agencies						
Highways and Bridges	19,100	9,267	7,396	17,855	16,516	6,208
Mass Transit	305,279	314,883	340,150	331,682	309,533	279,500
Port Facilities	78,073	8,905	10,355	43,044	49,672	17,006
Economic Development Sites	4,265	1,454	3,007	5,368	10,674	12,372
Park and Recreation Facilities	NA	9,608	2,065	727	1,720	176
Regional Water and Sewer System	NA	363	766	891	533	6,479
Sub-total State & Semi-Autonomous	406,717+	344,480	360,732	399,567	388,648	321,741
Utility Investment						
Boston Water and Sewer	NA	6,512	7,604	6,280	7,825	10,519
Telephone, Gas, Electric	55,000	55,000	55,000	55,000	55,000	55,000
Cablevision	–	–	–	–	–	40,000
Sub-total Utility	55,000	61,512	62,604	61,280	62,825	105,519
Total Investment in Boston's Infrastructure	513,354+	469,548	470,683	485,151	467,953	460,807

Funding Analysis:
- 58% Federal
- 15% State (including MDC and MBTA bonds)
- 9% Semi-Autonomous Authorities (including BWSC)
- 5% City
- 13% Utilities (except BWSC)

1
2 Investments are grouped according to the organization which managed the investment. Includes the BRA and EDIC.

TABLE 34

PUBLIC AND PRIVATE INVESTMENT IN BOSTON RELATIVE TO
GROSS CITY PRODUCT
(In Millions of Constant 1983 Dollars)

Year(s)	Boston Gross City Product (GCP)[1]	Private Investment[2]	Public Investment[3]	Private & Public Investment	Private Investment As % of GCP	Public Investment As % of GCP	Public & Private Investment As % of GCP
1978	15,607	305	658	963	2.0	4.2	6.2
1979	16,125	189	541	730	1.2	3.4	4.6
1980	16,495	241	502	743	1.5	3.0	4.5
1981	16,423	878[4]	473	1,351	5.3	2.9	8.2
1982	16,160	445	428	873	2.8	2.6	5.4
1983	16,516	657	362	1,019	4.0	2.2	6.2
Projected							
1984	16,776	1,540	686	2,226	9.2	4.1	13.3
1985-87	51,078	2,231	2,406	4,637	4.4	4.7	9.1

1 Estimates of Gross City Product drawn from unpublished memo, Gregory Perkins, BRA Research Department. Estimates of GCP after 1983 based upon employment projections and 1983 average gross product per worker.

2 Estimates of private investment drawn from BRA Research Department computer file, maintained by John Avault. Investment figures do not include private equipment purchases, land acquisition or financing costs. However estimates of private utility investments in Boston plant and equipment have been added.

3 Public investment includes best estimate of City, State, and semi-autonomous investments in Boston. Also, in the case of the MDC and MBTA, includes some investments outside of Boston that will have significant benefits for the City.

4 1981 estimate of private investment includes $372 million for the Harvard Medical Area Total Energy Plant (MATEP). Without this investment private investment as a percent of GCP drops from 5.3 to 3.1 percent.

Revised 5/3/84

TABLE 33

CURRENTLY IDENTIFIED INVESTMENT NEEDS OF BOSTON'S INFRASTRUCTURE*
($000's)

	1984	1985-87	1988-89+	Currently Unscheduled
City Agencies[1]				
Streets, Sidewalks and Lighting	19,711	38,400	NA	-
Park and Recreation Facilities	3,777	14,500	NA	-
Hospitals, Schools and Other Municipal Buildings	18,349	239,600	NA	-
Infrastructure for Community, Economic and Industrial Development	20,200	76,500	NA	-
Sub-total City Agencies	62,037	369,000	NA	-
State Agencies and Semi-Autonomous Authorities				
Highways and Bridges	122,500	52,400	11,000	2,216,500
Mass Transit	310,500	1,350,100	1,093,500	-
Port Facilities	60,000	35,000+	35,000+	100,000
Economic Development Sites	28,620	160,000+	NA	-
Park and Recreation Facilities	10,500	32,500	5,000	-
Regional Water and Sewer System	44,900	306,000	346,800+	1,500,000
State Buildings	NA	41,600	NA	10,000+
Sub-total State and Semi-Autonomous Authorities	577,020	1,977,600+	1,481,400+	3,826,500+
Utilities				
Boston Water and Sewer	30,885	58,500+	NA	-
Telephone, Gas, Electric	NA	750,000	NA	40,000
Cable Television	60,000	NA	NA	-
Sub-total Utilities	90,885	808,500+	NA	40,000
Total Currently Identified Investment Needs	729,942	3,155,100+	1,481,400+	3,866,500

[1] Approximately 17 million in Federal and State funding for reconstruction of City Streets is listed in this table under State Highway and Bridge work.

* See tables 17,29, and 30-33 for description of investments and analysis of prospective funding sources.